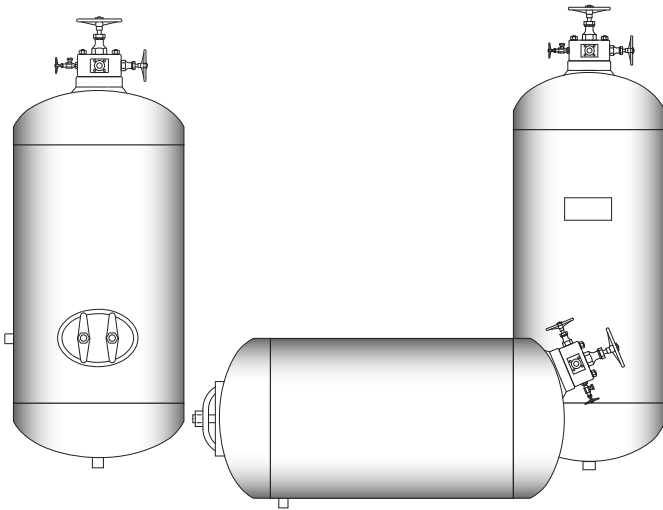


Production



BAM - SAM

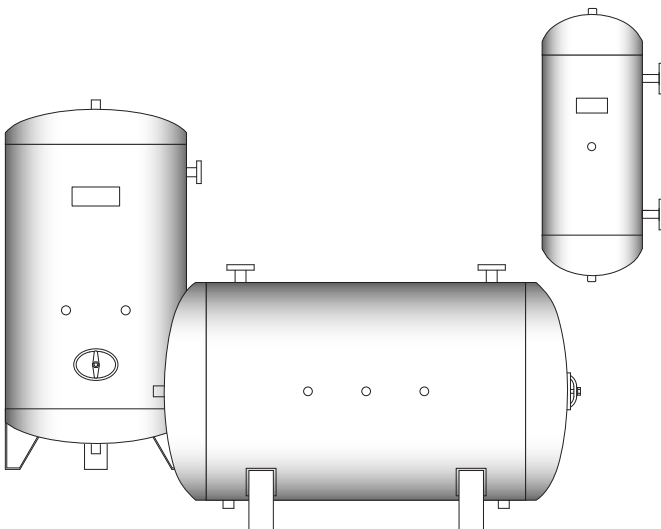
Compressed Air Vessels for Diesel Engine Starting

Capacity from 100 to 4.000 Lt.
 Design Pressure from 30 to 40 bar
 Configuration Vertical - Horizontal

CRB - CRS

Compressed Air Vessels for Diesel Engine Starting Light Series

Capacity from 125 to 1.500 Lt.
 Design Pressure from 30 to 40 bar
 Configuration Vertical - Horizontal



BAC - SAC (HP)

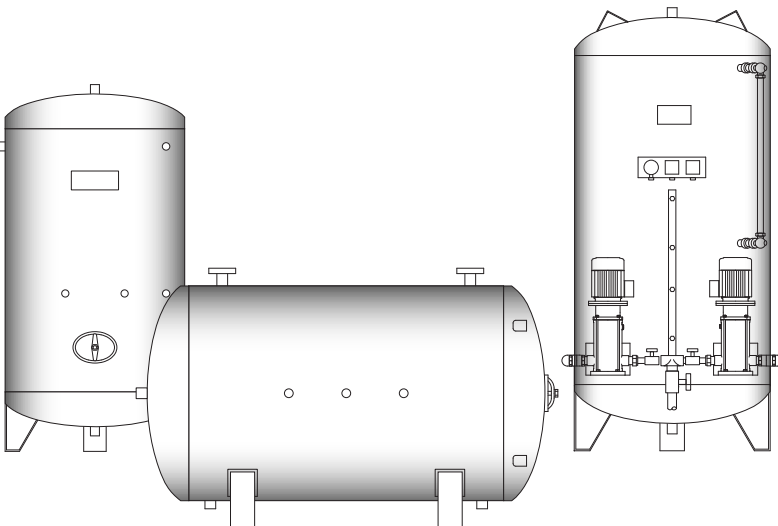
Pressure Vessels for Compressed Air and Inert Gases

Capacity from 5 to 4.000 Lt.
 Design Pressure from 12 to 40 bar
 Configuration Vertical - Horizontal

BAC - SAC (LP)

Pressure Vessels for Compressed Air and Inert Gases

Capacity from 15 to 5.000 Lt.
 Design Pressure 8 bar
 Configuration Vertical - Horizontal



IDR

Autoclave Vessels

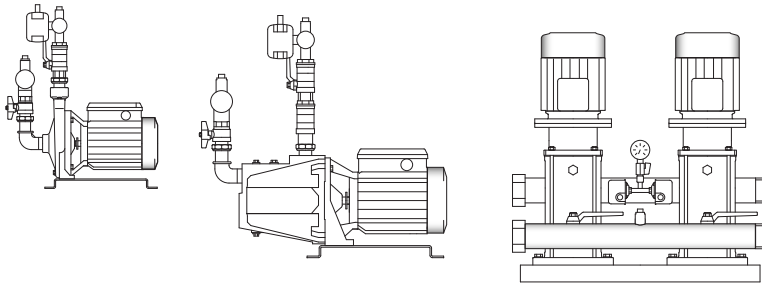
Capacity from 100 to 5.000 Lt.
 Design Pressure 6 bar
 Configuration Vertical - Horizontal

IDRG

Package Autoclave Systems

Capacity da 500 a 2.000 Lt.
 Design Pressure 6 bar
 Configuration Vertical

Pressure Vessels

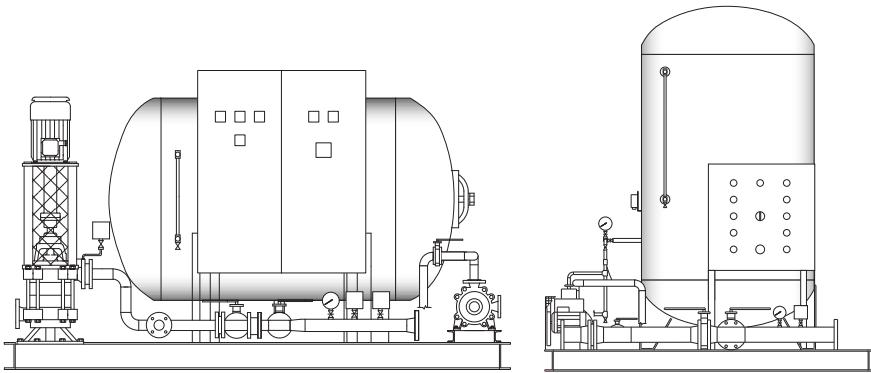


2CH - BP - VX

Pressure Boosting Plants with two Centrifugal Pumps

Available in a wide range of Flowrates and Pressures

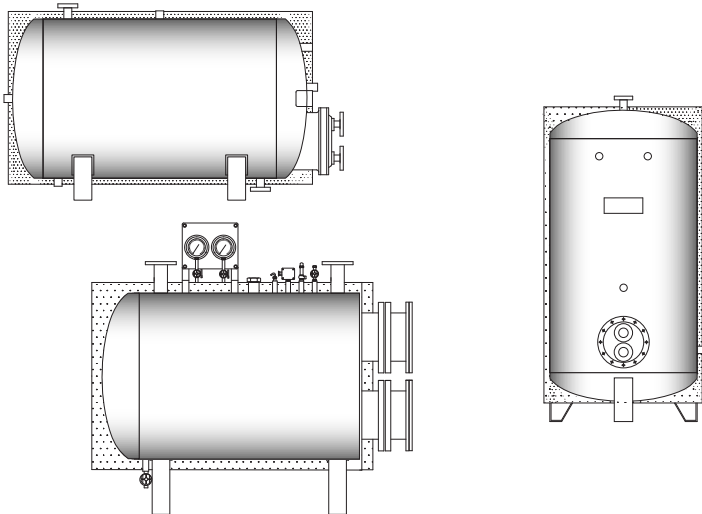
- Voltage 380 V. - 50 Hz. / 440 V. - 60 Hz.
 Configuration Vertical - Horizontal



SKA

Firefighting Autoclave Systems

- Capacity - Design Pressure 2.800 Lt. - 10 bar
 Capacity - Design Pressure 2.000 Lt. - 17 bar
 Configuration Vertical - Horizontal



ERIS

Electrical Heaters for Hot Water

- Capacity from 100 to 3.000 Lt.
 Design Pressure 6 bar
 Max. Temperature 90°C
 Power from 3 to 50 Kw
 Configuration Vertical - Horizontal

REI

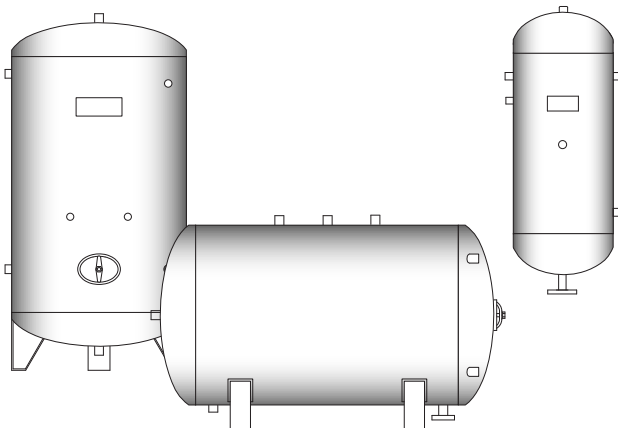
Instantaneous Electrical Heaters For Conditioning and Fresh Water

- Capacity 300 Lt. - 350 Lt.
 Design Pressure 6 bar
 Max. Temperature 90°C
 Power from 60 to 160 Kw
 Configuration Horizontal

TERIS

Thermo-Electric Heaters for Hot Water

- Capacity from 500 to 3.000 Lt.
 Design Pressure 6 bar
 Max. Temperature 90°C
 Power from 14.200 a 67.600 Kcal/h
 Configuration Vertical - Horizontal



VEC

Expansion Tanks for Hot Water

- Capacity from 100 to 5.000 Lt.
 Design Pressure 6 bar
 Max. Temperature 90°C
 Configuration Vertical - Horizontal

VER

Expansion Tanks for Refrigerated Water

- Capacity from 100 to 5.000 Lt.
 Design Pressure 6 bar
 Min. Temperature 0°C
 Configuration Vertical - Horizontal

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Type **BAM** Datasheet **1.5.20.3340**
 Rev. 0 Date 02/03/2003 Page 1/1

CONFIGURATION

Cylindrical vessel, either vertical or horizontal version, complete with valvehead, ISAF or UNI/UNAV type, and with the accessories requested by the classification society.

APPLICATION

Installation on compressed air lines for diesel engine starting.

DESIGN CONDITIONS

Max. Pressure 33 ÷ 40 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.
 For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

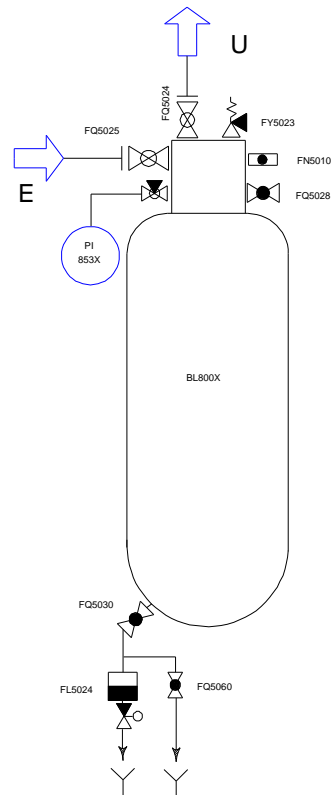
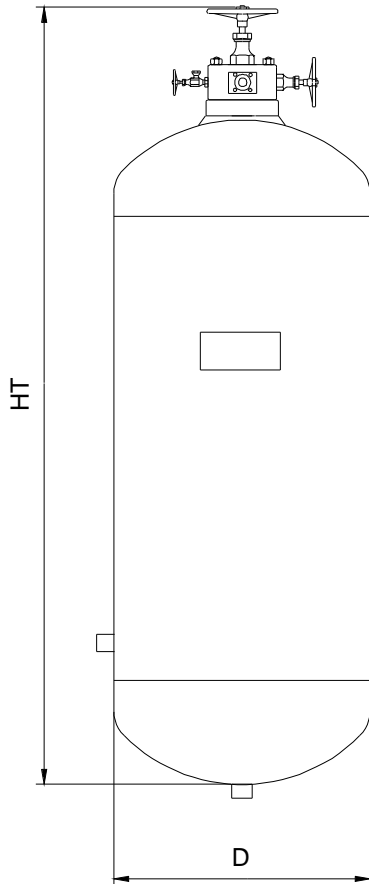
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
BAM100	100	40	356	1500			ND15 - 25	135
BAM150	150	40	356	2050			ND15 - 25	185
BAM250	250	40	508	1750			ND15 - 25	220
BAM500	500	40	508	3100			ND20 - 40	285
BAM500	500	33	610	2300			ND20 - 40	345
BAM700	700	33	610	3180			ND20 - 40	475

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Type **SAM** Datasheet **2.5.20.3033**
 Rev. 0 Date 02/03/2003 Page 1/1

CONFIGURATION

Vertical cylindrical vessel, with or without supports for floor installation, complete with valvehead, ISAF or UNI/UNAV type, and with the accessories requested by the classification society.

APPLICATION

Installation on compressed air lines for diesel engine starting.

DESIGN CONDITIONS

Max. Pressure 30 ÷ 33 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

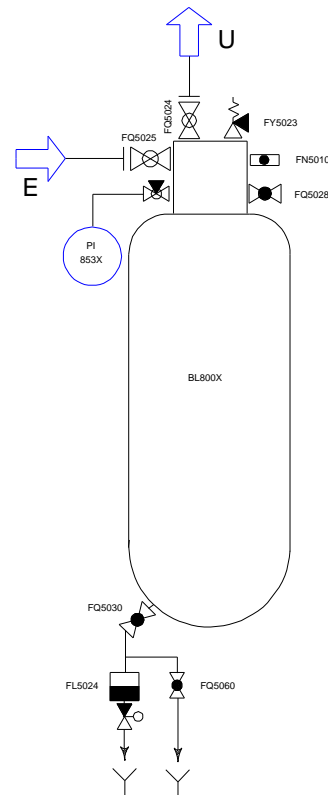
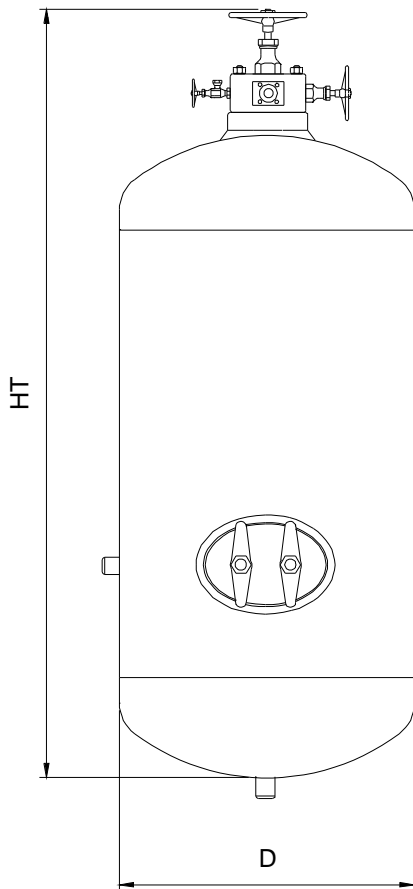
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
SAM1000V	1000	33	800	2550			ND20 - 40	550
SAM1500V	1500	33	950	2700			ND20 - 40	800
SAM2000V	2000	33	1100	2850			ND20 - 40	1160
SAM3000V	3000	30	1300	2950			ND25 - 50	1480
SAM4000V	4000	30	1600	2700			ND25 - 50	2050

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Type	SAM	Datasheet	3.5.20.3033
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Horizontal cylindrical vessel, with or without saddles, complete with valvehead, ISAF or UNI/UNAV type, and with the accessories requested by the classification society.

APPLICATION

Installation on compressed air lines for diesel engine starting.

DESIGN CONDITIONS

Max. Pressure 30 ± 33 bar
Max. Temperature 50 °C
Min. Temperature 0 °C

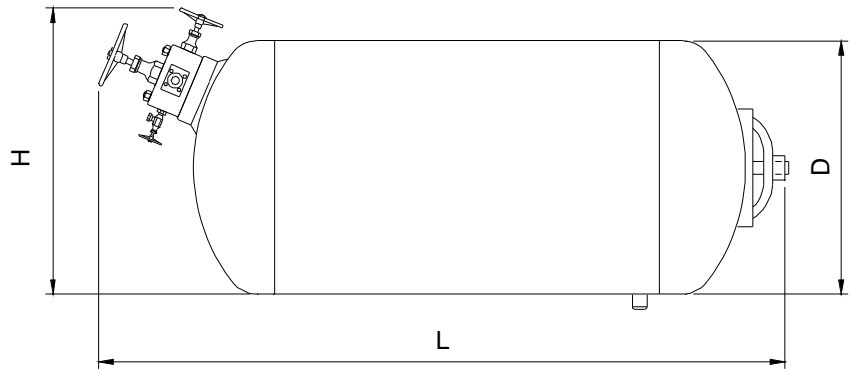
SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.



TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

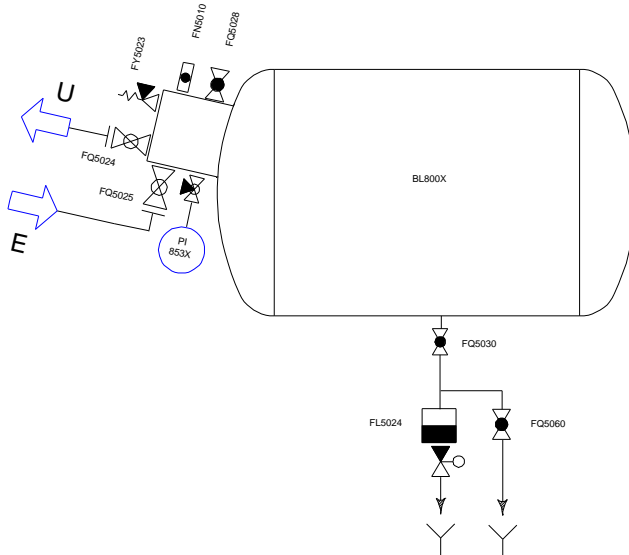
A1 STEEL P 265 GH
A2 STEEL P 355 NH
A3 ASTM A 106 B
X AISI 304 L
XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
SAM1000H	1000	33	800		2650	900	ND20 - 40	515
SAM1500H	1500	33	950		2800	1050	ND20 - 40	800
SAM2000H	2000	33	1100		2950	1100	ND20 - 40	1160
SAM3000H	3000	30	1300		3000	1300	ND25 - 50	1480
SAM4000H	4000	30	1600		2800	1600	ND25 - 50	2050



COMPRESSED AIR VESSEL

FOR DIESEL ENGINE STARTING - LIGHT SERIES

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 Tel. 010781793 - 0107848136 Fax 0107268816 e-mail: info@isafmtg.com

Type **CRB** Datasheet **4.5.20.40**
 Rev. 0 Date 02/03/2003 Page 1/1

CONFIGURATION

Cylindrical vessel, either vertical or horizontal version, complete with valvehead, ISAF or UNI/UNAV type, and with the accessories requested by the classification society.

APPLICATION

Installation on compressed air lines for diesel engine starting.

CONSTRUCTION

The choice of a type of stainless steel with high mechanical features allows particularly light constructions.

DESIGN CONDITIONS

Max. Pressure 40 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

YXX - CHROME STEEL

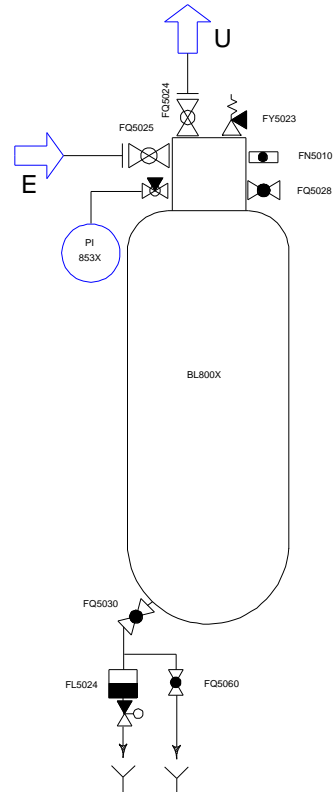
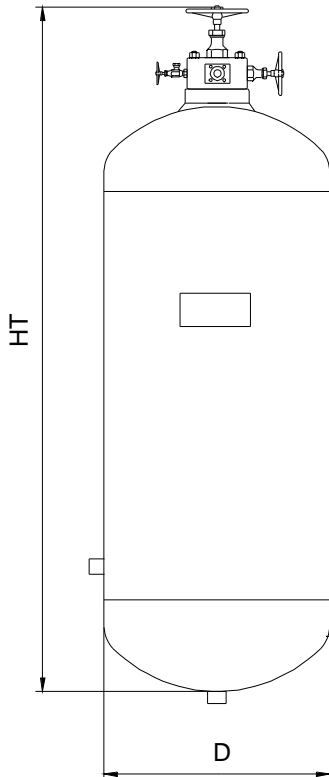
CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Stainless steel construction does not need anticorrosion treatments either on internal or external surfaces.

The supplied vessel is painted on the outside.



All information and data shown on this datasheet can be modified without notice

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
CRB125	125	40	320	1750			ND15 - 25	57
CRB180	180	40	380	1800			ND15 - 25	68
CRB280	280	40	480	1800			ND15 - 25	113
CRB380	380	40	480	2200			ND20 - 40	141
CRB500	500	40	640	1800			ND20 - 40	189

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Type	CRS	Datasheet	5.5.20.30
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Vertical cylindrical vessel, with or without supports, complete with valvehead, ISAF or UNI/UNAV type, and with the accessories requested by the classification society.

APPLICATION

Installation on compressed air lines for diesel engine starting.

CONSTRUCTION

The choice of a type of stainless steel with high mechanical features allows particularly light constructions.

DESIGN CONDITIONS

Max. Pressure 30 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

YXX CHROME STEEL

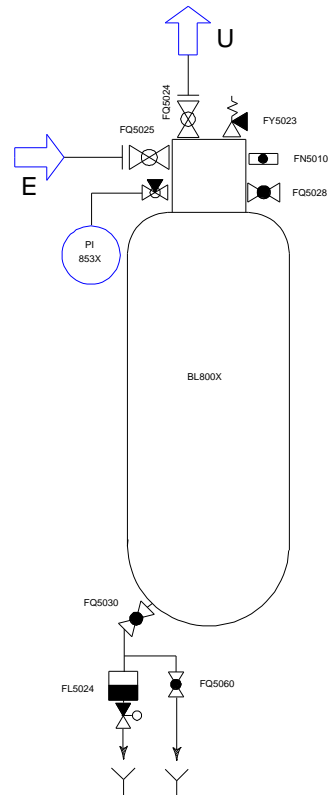
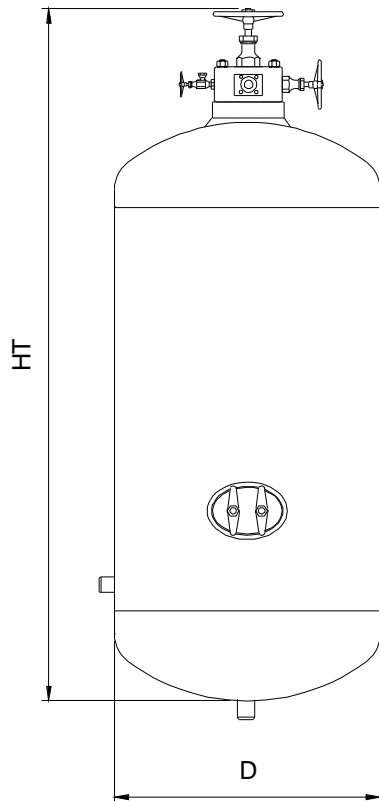
CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Stainless steel construction does not need anticorrosion treatments either on internal or external surfaces.

The supplied vessel is painted on the outside.



All information and data shown on this datasheet can be modified without notice

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
CRS800V	800	30	800	1800			ND20 - 40	800
CRS1000V	1000	30	800	2200			ND20 - 40	280
CRS1500V	1500	30	900	2600			ND20 - 40	494

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Type	CRS	Datasheet	6.5.20.30
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Horizontal cylindrical vessel, with or without saddles, complete with valvehead, ISAF or UNI/UNAV type, and with the accessories requested by the classification society.

APPLICATION

Installation on compressed air lines for diesel engine starting.

CONSTRUCTION

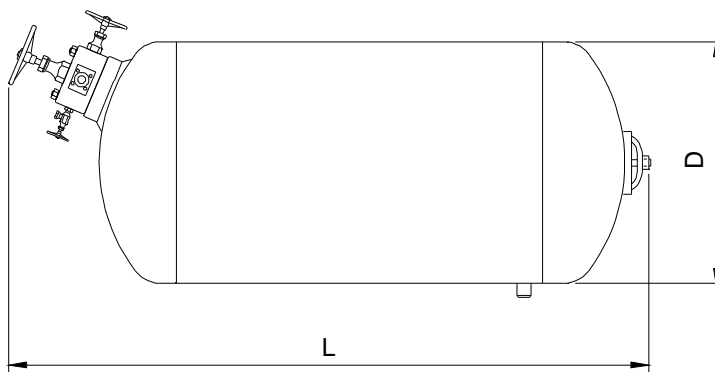
The choice of a type of stainless steel with high mechanical features allows particularly light constructions.

DESIGN CONDITIONS

Max. Pressure 30 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning. For an easier installation a wide range of components can be supplied.



TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

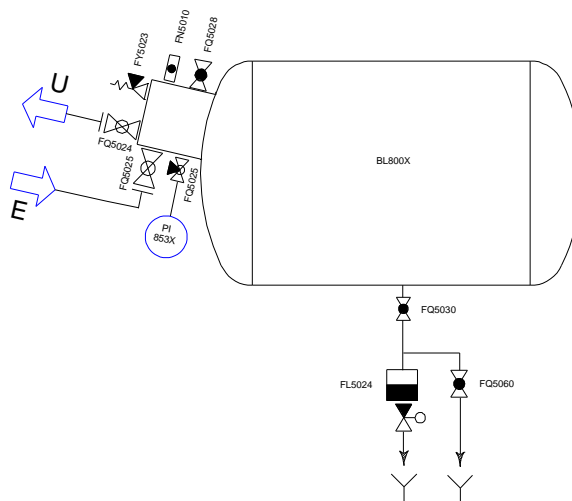
YXX CHROME STEEL

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Stainless steel construction does not need anticorrosion treatments either on internal or external surfaces. The supplied vessel is painted on the outside.



All information and data shown on this datasheet can be modified without notice

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
CRS800H	800	30	800		2150		ND20 - 40	230
CRS1000H	1000	30	800		2550		ND20 - 40	280
CRS1500H	1500	30	900		2950		ND20 - 40	494

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Type	BAC-HPT	Datasheet	32.5.20.1240
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Vertical cylindrical vessel, with or without supports, complete with valvehead, ISAF or UNI/UNAV type, and with the accessories requested by the classification society.

APPLICATION

Installation on compressed air lines for automatism and various services.

DESIGN CONDITIONS

Max. Pressure 12 ÷ 40 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

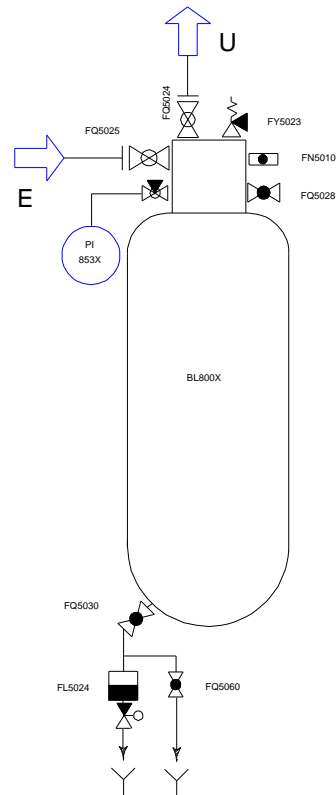
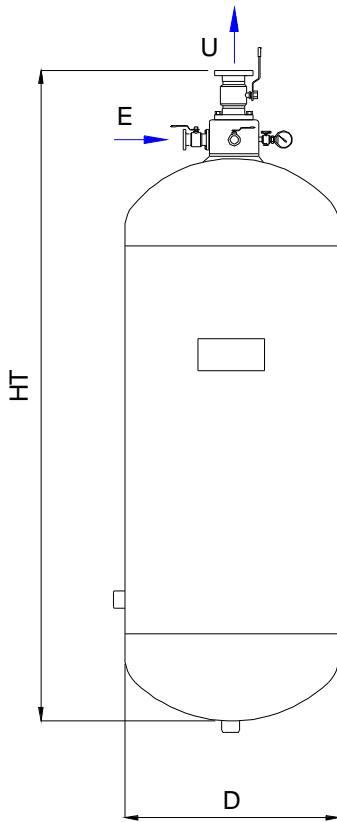
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
BAC-HPT50	50	12 - 40	320	1000			ND15 - 25	85
BAC-HPT80	80	12 - 40	320	1450			ND15 - 25	115



PRESSURE VESSEL

FOR COMPRESSED AIR AND INERT GASES

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 Tel. 010781793 - 0107848136 Fax 0107268816 e-mail: info@isafmtg.com

Type	BAC-HP	Datasheet	7.5.20.1240
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Cylindrical vessel, either vertical or horizontal version, complete with connections for plant and with the accessories requested by the classification society.

APPLICATION

Installation on compressed air lines for automatism and various services.

DESIGN CONDITIONS

Max. Pressure 12 ÷ 40 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

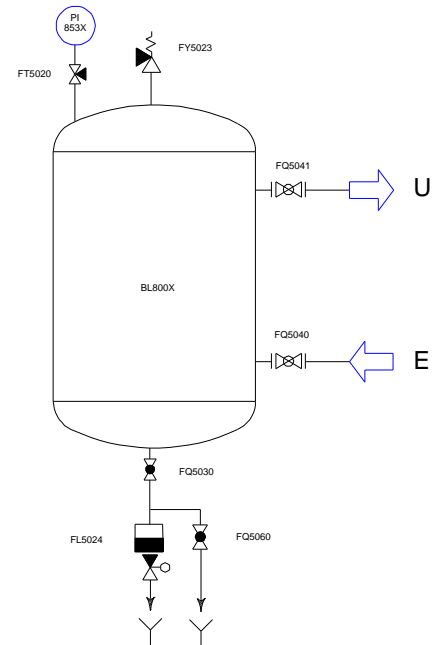
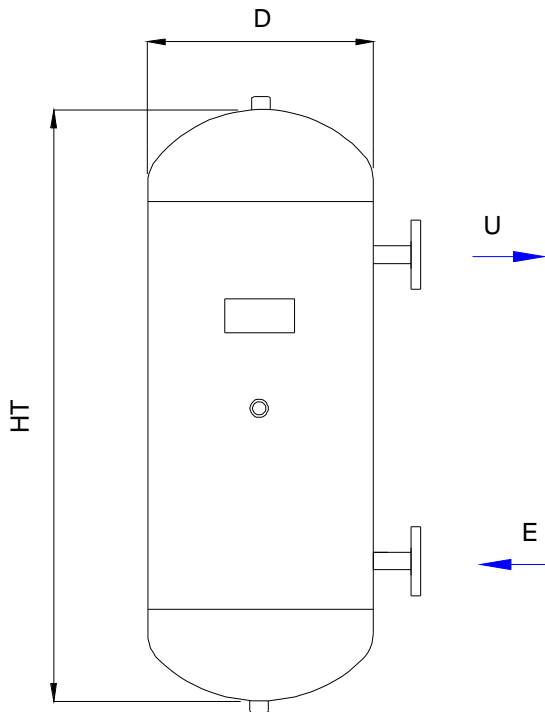
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI 2278/67 NP16 - UNI 6084/67 NP40

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
BAC-HP5	5	12÷40	140	450			1/2"G	12
BAC-HP10	10	12÷40	170	575			1/2"G	20
BAC-HP15	15	12÷40	220	500			1/2"G	31
BAC-HP25	25	12÷40	220	800			ND15	40
BAC-HP35	35	12÷40	220	1100			ND15	55
BAC-HP50	50	12÷40	320	750			ND20	70
BAC-HP80	80	12÷40	320	1150			ND20	100



PRESSURE VESSEL

FOR COMPRESSED AIR AND INERT GASES

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Type	SAC-HP	Datasheet	8.5.20.3033
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Vertical cylindrical vessel with supports for floor installation, complete with connections for plant and with the accessories requested by the classification society.

APPLICATION

Accumulation of compressed air and inert gases for various services.

DESIGN CONDITIONS

Max. Pressure 30 ± 33 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

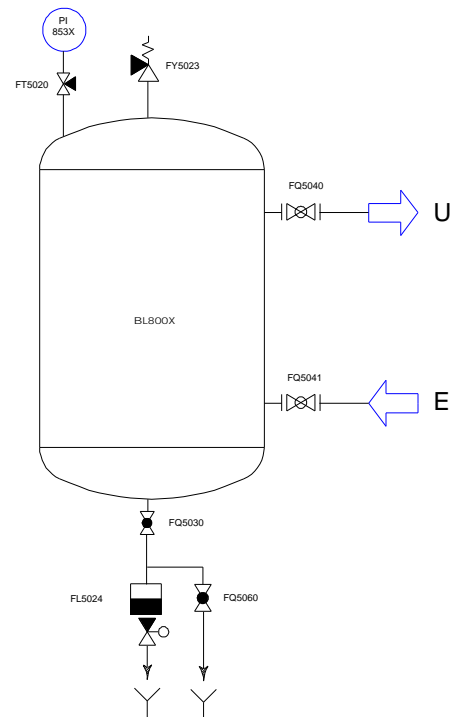
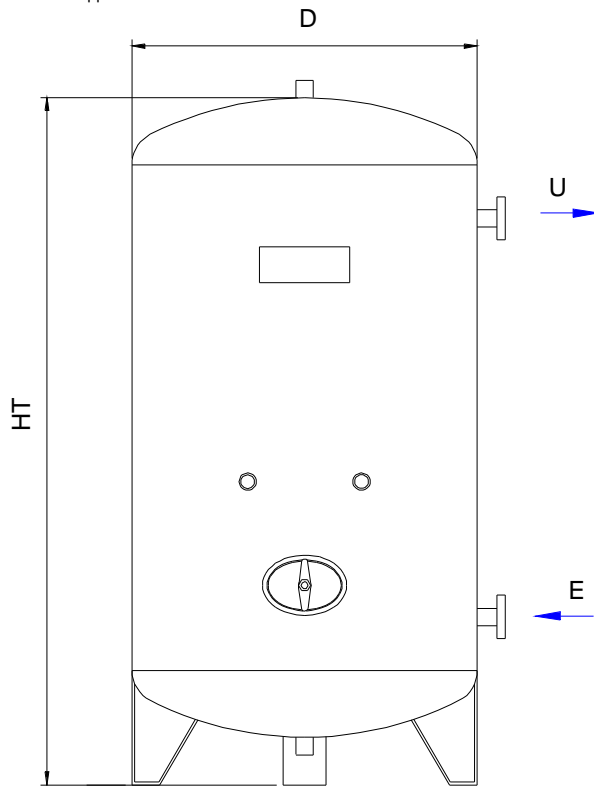
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI 6084/67 NP40

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
SAC-HP1000V	1000	33	800	2350			ND32	515
SAC-HP1500V	1500	33	950	2500			ND32	775
SAC-HP2000V	2000	33	1100	2650			ND40	1125
SAC-HP3000V	3000	30	1300	2750			ND50	1440
SAC-HP4000V	4000	30	1600	2450			ND80	2015

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Type **SAC-HP** Datasheet **9.5.20.3033**
 Rev. 0 Date 02/03/2003 Page 1/1

CONFIGURATION

Horizontal cylindrical vessel on saddles, complete with connections for plant and with the accessories requested by the classification society.

APPLICATION

Accumulation of compressed air and inert gases for various services.

DESIGN CONDITIONS

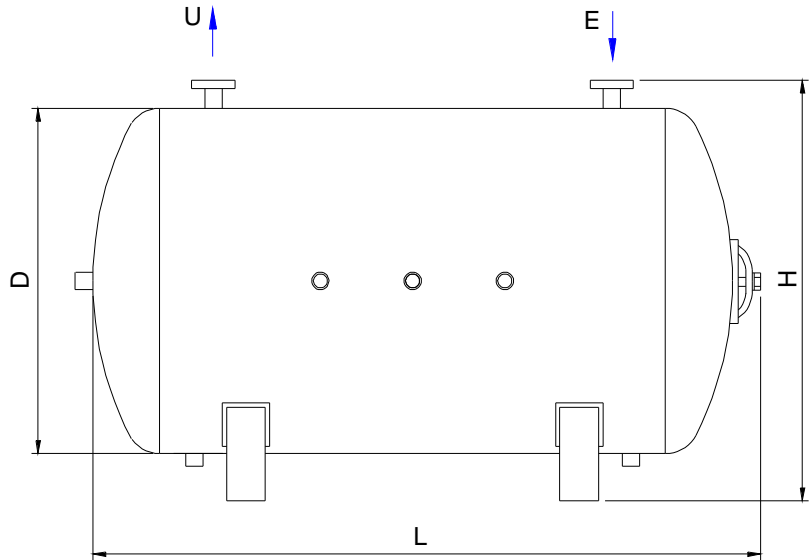
Max. Pressure 30 ÷ 33 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning. For an easier installation a wide range of components can be supplied.



TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

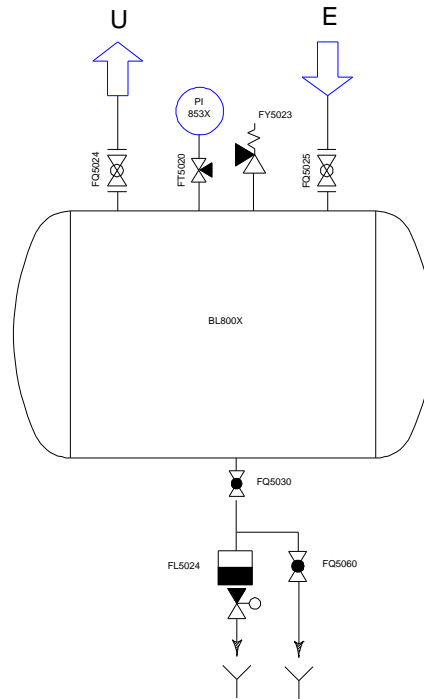
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI 6084/67 NP40

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
SAC-HP1000H	1000	33	800		2300	1150	ND32	650
SAC-HP1500H	1500	33	950		2450	1300	ND32	1000
SAC-HP2000H	2000	33	1100		2600	1450	ND40	1350
SAC-HP3000H	3000	30	1300		2700	1650	ND50	1650
SAC-HP4000H	4000	30	1600		2400	1950	ND80	2300

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Type	BAC-LPT	Datasheet	31.5.20.8
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Vertical cylindrical vessel, with or without supports, complete with valvehead, ISAF or UNI/UNAV type, and with the accessories requested by the classification society.

APPLICATION

Installation on compressed air lines for automatism and various services.

DESIGN CONDITIONS

Max. Pressure 8 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

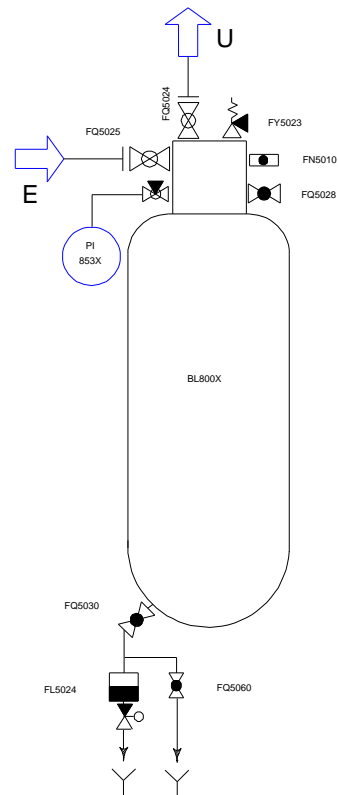
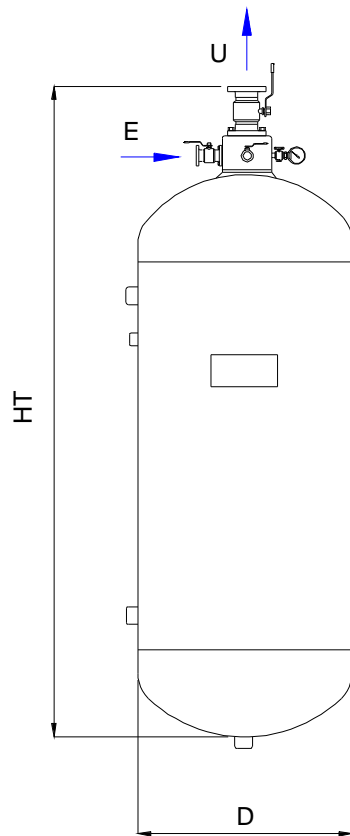
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
BAC-LPT50	50	8	280	1150			ND15 - 20	50
BAC-LPT100	100	8	350	1400			ND15 - 20	65
BAC-LPT150	150	8	400	1550			ND15 - 20	71
BAC-LPT200	200	8	440	1700			ND15 - 25	88
BAC-LPT270	270	8	490	1750			ND15 - 25	95



PRESSURE VESSEL

FOR COMPRESSED AIR AND INERT GASES

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Type **BAC-LP** Datasheet **10.5.20.8**
 Rev. 0 Date 02/03/2003 Page 1/1

CONFIGURATION

Cylindrical vessel, either vertical or horizontal version, complete with connections for plant and with the accessories requested by the classification society.

APPLICATION

Installation on compressed air lines for automatism and various services.

DESIGN CONDITIONS

Max. Pressure 8 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

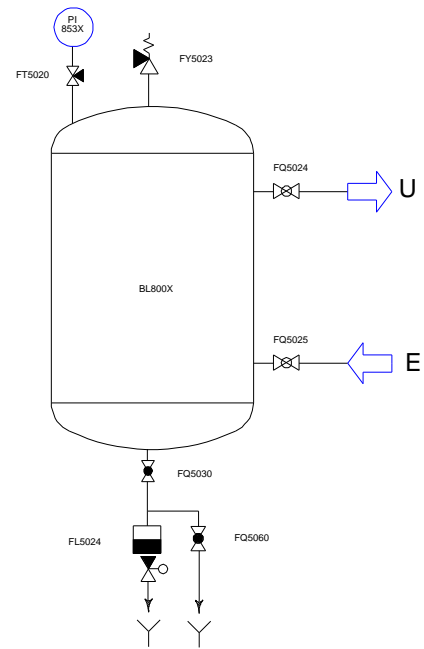
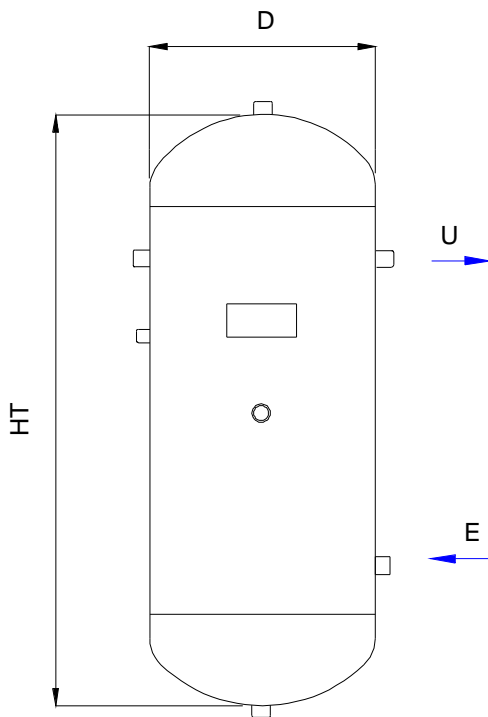
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
BAC-LP15	15	8	210	600			1/2"G	11
BAC-LP25	25	8	240	600			1/2"G	16
BAC-LP50	50	8	280	860			1/2"G	26
BAC-LP100	100	8	350	1100			1/2"G	40
BAC-LP150	150	8	400	1250			1/2"G	46
BAC-LP200	200	8	440	1400			1"G	58
BAC-LP270	270	8	490	1460			1"G	65

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Type **SAC-LP** Datasheet **11.5.20.8**
 Rev. 0 Date 02/03/2003 Page 1/1

CONFIGURATION

Vertical cylindrical vessel with supports for floor installation, complete with connections for plant and with the accessories requested by the classification society.

APPLICATION

Accumulation of compressed air and inert gases for various services.

DESIGN CONDITIONS

Max. Pressure 8 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.
 For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

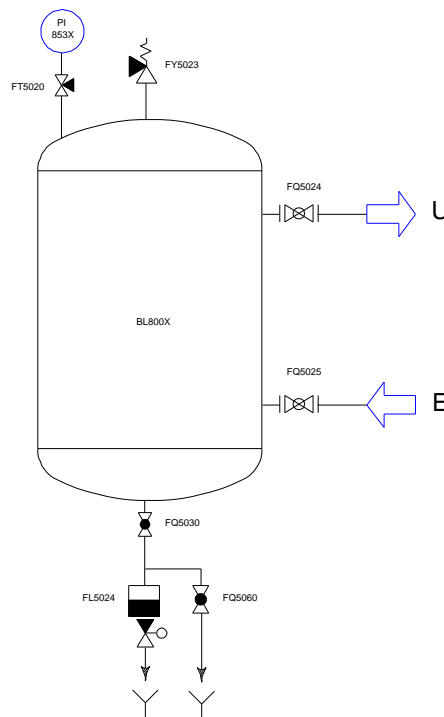
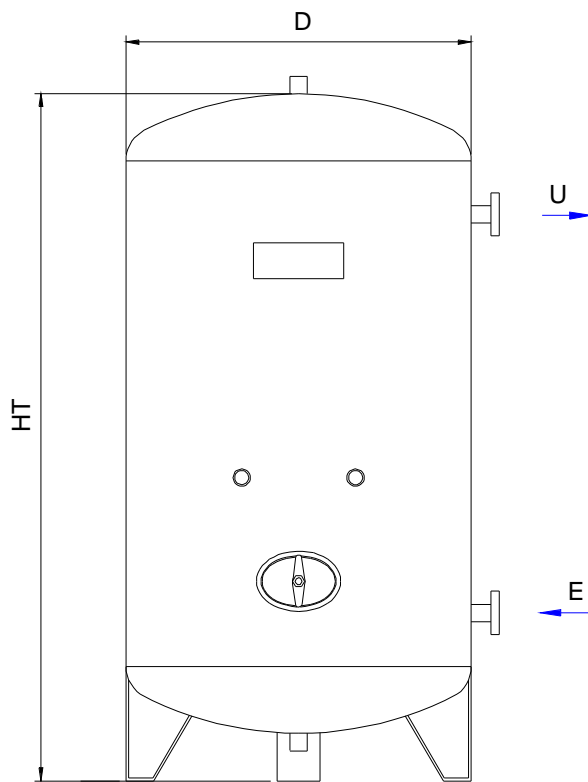
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
SAC-LP500V	500	8	600	2050			ND32	165
SAC-LP1000V	1000	8	800	2240			ND32	270
SAC-LP1500V	1500	8	950	2450			ND40	340
SAC-LP2000V	2000	8	1100	2450			ND50	465
SAC-LP3000V	3000	8	1300	2600			ND50	760
SAC-LP5000V	5000	8	1600	2850			ND80	1030

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Type **SAC-LP** Datasheet **12.5.20.8**
 Rev. 0 Date 02/03/2003 Page 1/1

CONFIGURATION

Horizontal cylindrical vessel on saddles, complete with connections for plant and with the accessories requested by the classification society.

APPLICATION

Installation on compressed air lines for automatism and various services.

DESIGN CONDITIONS

Max. Pressure 8 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

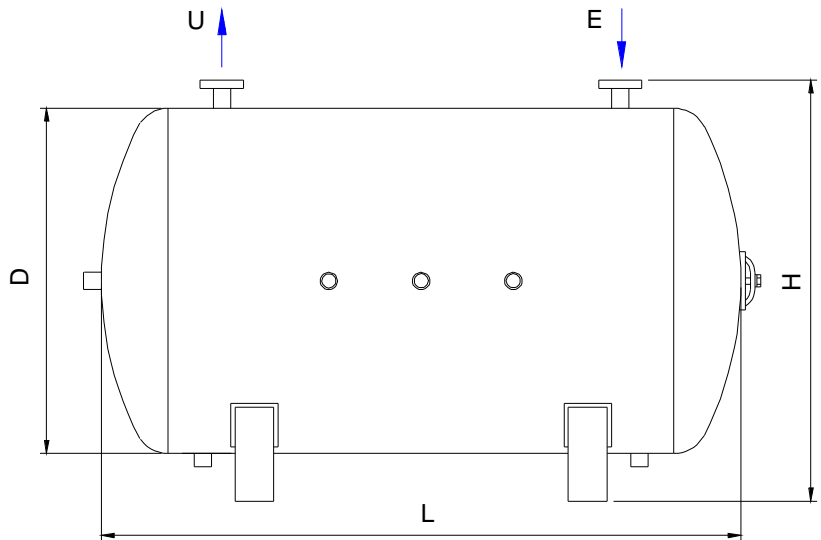
SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.



TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

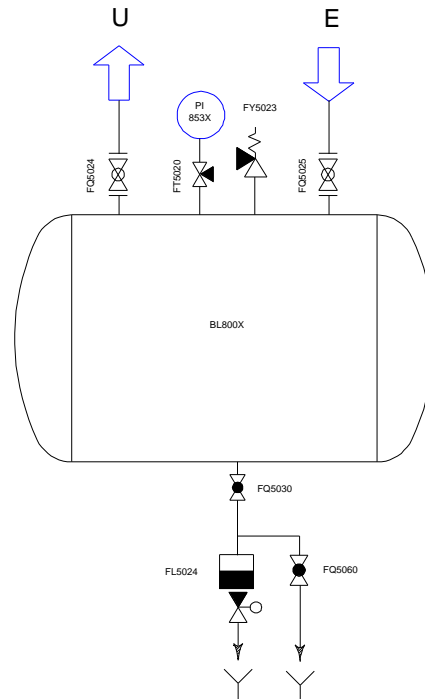
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
SAC-LP500H	500	8	600		1900	950	ND32	310
SAC-LP1000H	1000	8	800		2100	1150	ND40	420
SAC-LP1500H	1500	8	950		2300	1300	ND50	540
SAC-LP2000H	2000	8	1100		2300	1450	ND50	660
SAC-LP3000H	3000	8	1300		2450	1650	ND80	960
SAC-LP5000H	5000	8	1600		2700	1950	ND80	1320

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Type **IDR** Datasheet **13.5.10.6**
 Rev. 0 Date 02/03/2003 Page 1/1

CONFIGURATION

Vertical cylindrical vessel with supports for floor installation, complete with connections for plant and with the accessories requested by the classification society.

APPLICATION

To assure a constant average pressure and guarantee a rational water supply into the water lines.

DESIGN CONDITIONS

Max. Pressure 6 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

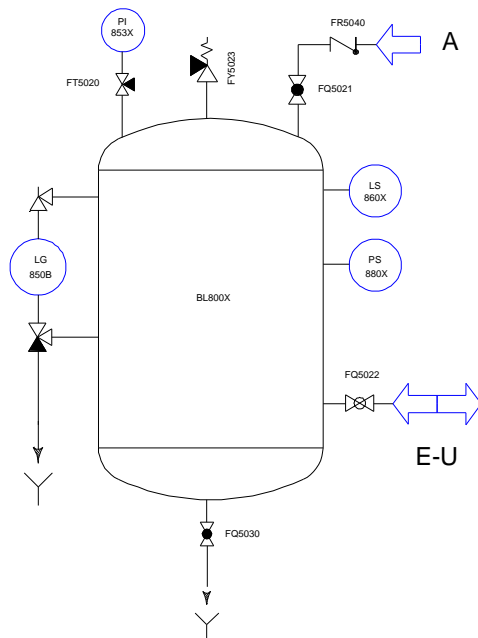
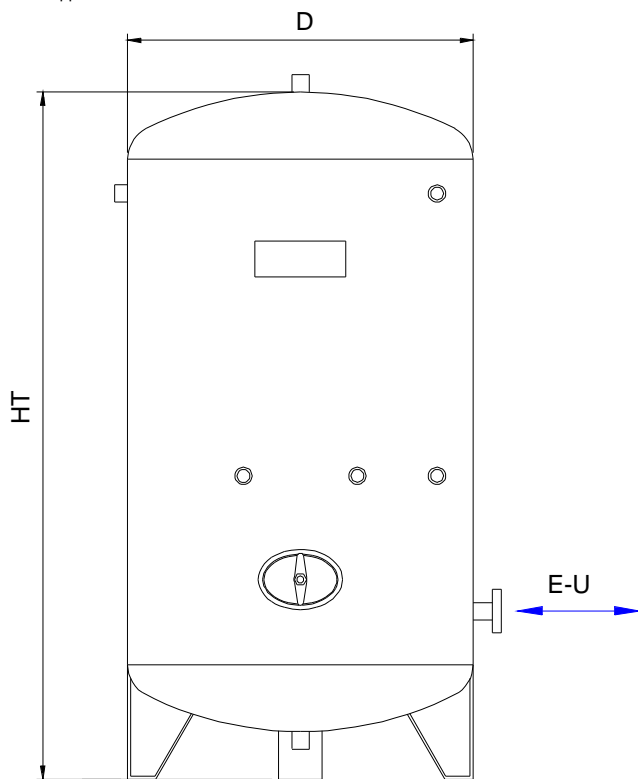
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
IDR100V	100	6	400	1000			1"G	43
IDR200V	200	6	400	1850			1"G	68
IDR300V	300	6	600	1350			1 1/4"G	78
IDR500V	500	6	600	1950			ND32	100
IDR750V	750	6	800	1750			ND40	154
IDR1000V	1000	6	800	2300			ND50	272
IDR1500V	1500	6	950	2450			ND50	340
IDR2000V	2000	6	1100	2470			ND80	465
IDR3000V	3000	6	1300	2600			ND80	765
IDR5000V	5000	6	1600	2900			ND100	1025

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Type **IDR** Datasheet **14.5.10.6**
 Rev. 0 Date 02/03/2003 Page 1/1

CONFIGURATION

Horizontal cylindrical vessel on saddles for floor installation, complete with connections for plant and with the accessories requested by the classification society.

APPLICATION

To assure a constant average pressure and guarantee a rational water supply into the water lines.

DESIGN CONDITIONS

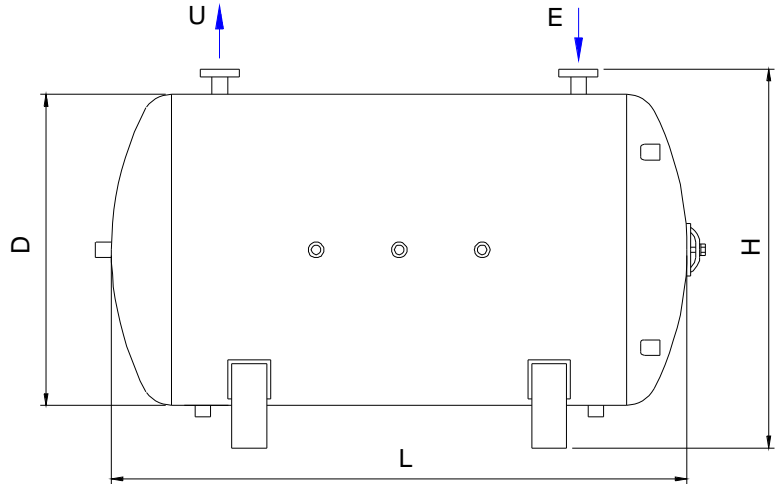
Max. Pressure 6 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.
 For an easier installation a wide range of components can be supplied.



TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

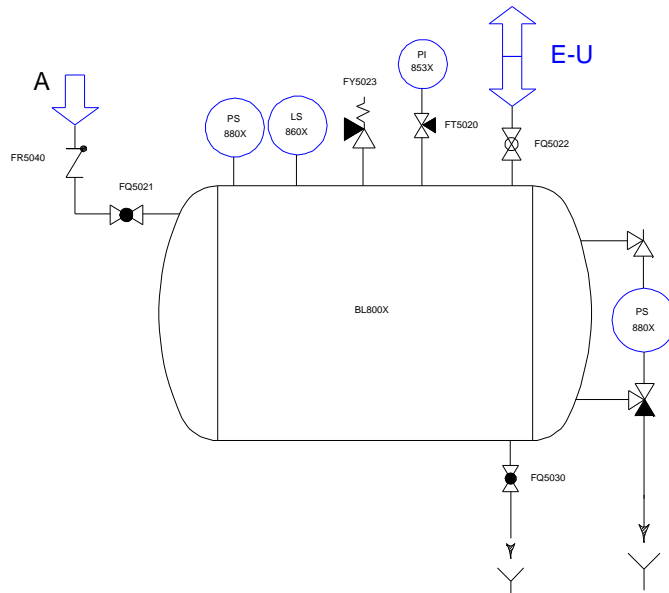
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
IDR100H	100	6	400		1000	630	1"G	90
IDR200H	200	6	400		1850	630	1"G	115
IDR300H	300	6	600		1350	830	1 1/4"G	128
IDR500H	500	6	600		1950	950	ND32	150
IDR750H	750	6	800		1750	1150	ND40	254
IDR1000H	1000	6	800		2300	1150	ND50	420
IDR1500H	1500	6	950		2450	1300	ND50	540
IDR2000H	2000	6	1100		2470	1450	ND80	660
IDR3000H	3000	6	1300		2600	1650	ND80	960
IDR5000H	5000	6	1600		2900	1950	ND100	1320

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Type	IDRG	Datasheet	15.7.10.6
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Pressurization system, completely assembled, made of: vertical cylindrical vessel, no.2 centrifugal pumps, switchboard, inlet and outlet manifolds with check and non-return valves, adjustable differential pressure switches, pressure gauge and tested safety valve. The supplied switchboard has to be installed separately.

APPLICATION

To assure a constant average pressure and guarantee a rational water supply to the water lines.

DESIGN CONDITIONS

Max. Pressure 6 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

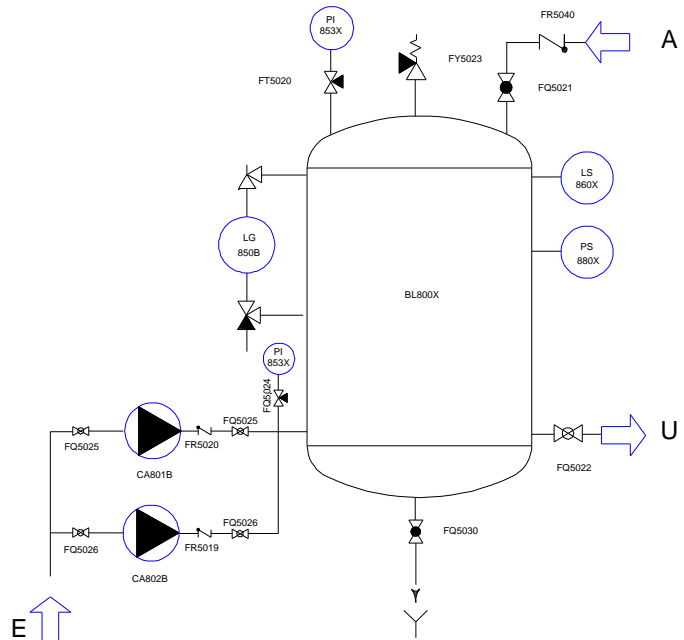
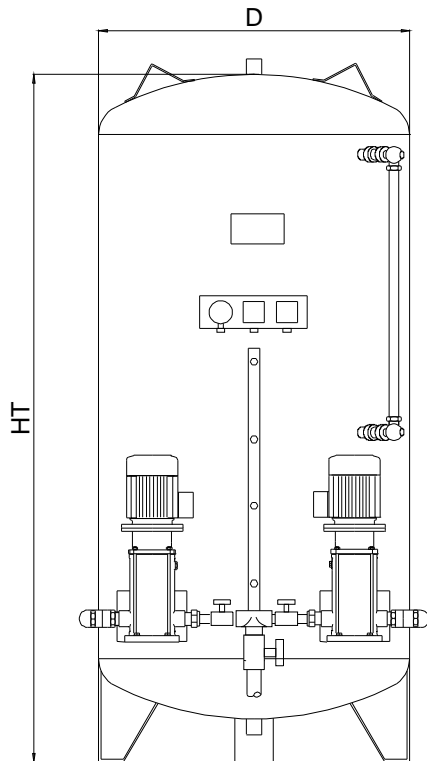
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
IDRG500V	500	6	600	1950			ND32	160
IDRG750V	750	6	800	1750			ND40	215
IDRG1000V	1000	6	800	2300			ND50	350
IDRG1500V	1500	6	950	2450			ND50	440
IDRG2000V	2000	6	1100	2470			ND80	560

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Type	2CH	Datasheet	30.9.10
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Pressure boosting plant, completely assembled on a rigid structure, consisting of:
 no.2 multistage centrifugal E/pumps, inlet and outlet manifolds complete with check and non-return valves, adjustable differential pressure switches, pressure gauge and switchboard.
 The supplied switchboard complies with the regulations fixed by the classification societies and has to be installed separately.

APPLICATION

This system assure a constant average pressure and guarantee rational water supply into the water lines.

OPERATION

When plant pressure decreases the pressure switches cause the start-up of the pumps in a cascade sequence.

MOTORS

2-pole induction motors
 Three-phase 380 Vac 50 Hz. n= 2900 1/min.
 440 Vac 60 Hz. n= 3500 1/min.
 Other voltages and frequencies on request.

COMPLETE SYSTEMS

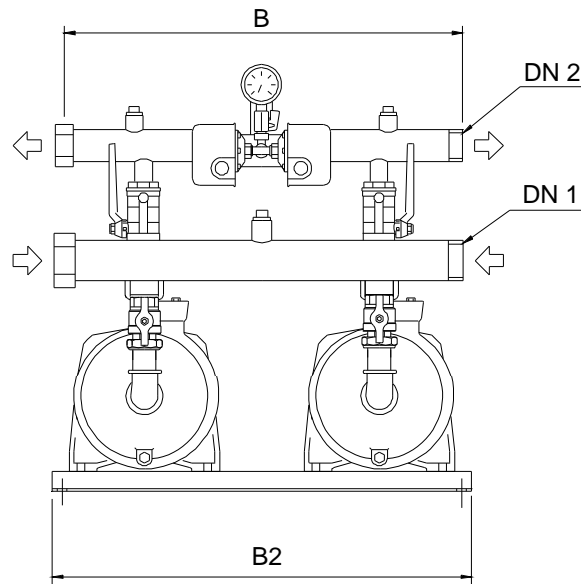
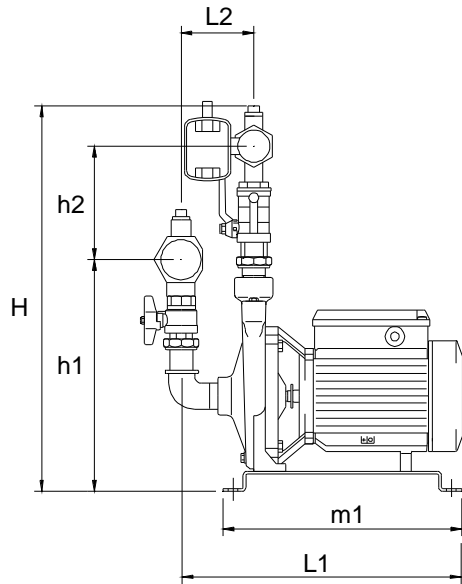
The pressure boosting plants can be supplied connected to the autoclave vessel, in package, complete with accessories, ready for use.

INSTALLATION

The equipment is supplied with instructions for assembling and maintenance. In any case, installation must comply with the regulations fixed by the classification society.

MATERIALS

Body	Cast Iron 200 ISO 185
Cover	Bronze G - Cu Sn 10 UNI 7013
Diffuser	
Impeller	OT - P - Cu Zn 40 Pb 2 UNI 5705
Shaft	1.4305 EN10088 (AISI 303) 1.4401 EN10088 (AISI316)
Mechanical seal	Graphite - Ceramic - NBR



All information and data shown on this datasheet can be modified without notice

Voltage V. 380 Hz.50 - V.440 Hz.60

Model	Power kW	Max Flowrate Lt./h		Press. switch setting bar		H	h1	h2	L1	L2	m1	B2	B	Manifolds		Weight Kg.
		Single Pump	Double Pump	P.Switch 1	P.Switch 2									ND1	ND2	
2CH20/110A	0,75+0,75	4200	8400	2,8÷3,8	2,5÷3,5	490	200	190	670	345				G2"	G1 1/2"	50
2CH20/140B	1,1+1,1	6000	12000	3,5÷5,0	3,2÷4,7	490	200	190	670	345				G2"	G1 1/2"	52
2CH20/140A	1,5+1,5	4800	9600	5,0÷6,3	4,7÷6,0	520	215	205	670	470	350	600	500	G2"	G1 1/2"	75
2CH25/190C	2,2+2,2	8400	16800	4,3÷5,8	3,8÷5,3	520	215	205	760	470				G2 1/2"	G2"	80
2CH25/200A	3+3	11800	22000	3,8÷4,8	3,5÷4,5	520	215	330	725	375				G2 1/2"	G2"	96

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Type	BP	Datasheet	28.9.10
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Pressure boosting plant, completely assembled on a rigid structure, consisting of:
 no.2 self-priming centrifugal E/pumps, inlet and outlet manifolds complete with check and non-return valves, adjustable differential pressure switches, pressure gauge and switchboard.
 The supplied switchboard complies with the regulations fixed by the classification societies and has to be installed separately.

APPLICATION

This system assure a constant average pressure and guarantee rational water supply into the water lines.

OPERATION

When plant pressure decreases the pressure switches cause the start-up of the pumps in a cascade sequence.

MOTORS

2-pole induction motors
 Three-phase 380 Vac 50 Hz. n= 2900 1/min.
 440 Vac 60 Hz. n= 3500 1/min.
 Other voltages and frequencies on request.

COMPLETE SYSTEMS

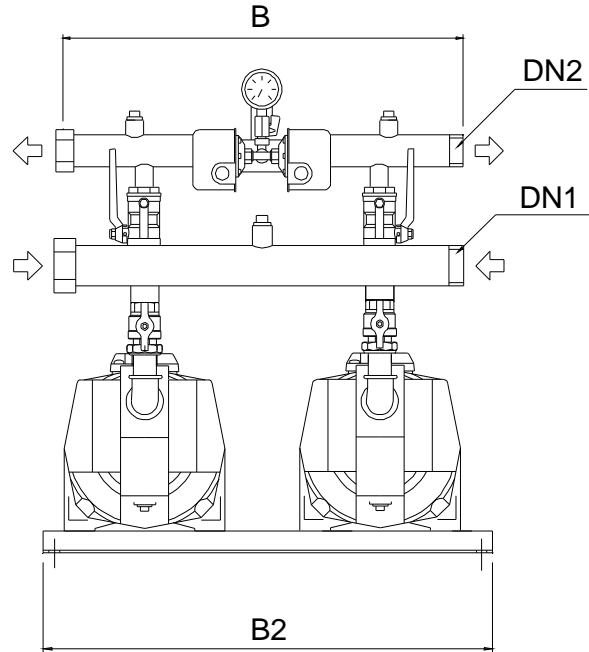
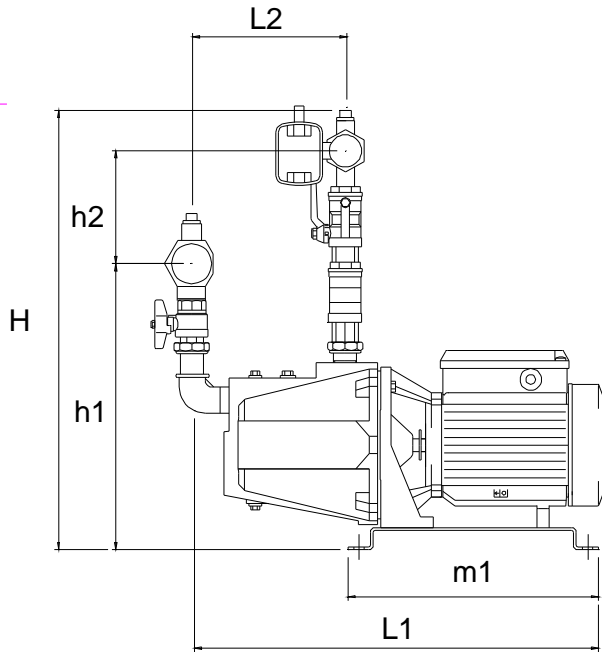
The pressure boosting plants can be supplied connected to the autoclave vessel, in package, complete with accessories, ready for use.

INSTALLATION

The equipment is supplied with instructions for assembling and maintenance. In any case, installation must comply with the regulations fixed by the classification society.

MATERIALS

Body	Cast Iron 200 ISO 185
Cover	Bronze G - Cu Sn 10 UNI 7013
Diffuser	
Impeller	OT - P - Cu Zn 40 Pb 2 UNI 5705
Shaft	1.4305 EN10088 (AISI 303) 1.4401 EN10088 (AISI316)
Mechanical seal	Graphite - Ceramic - NBR



All information and data shown on this datasheet can be modified without notice

Voltage V. 380 Hz.50 - V.440 Hz.60

Model	Power kW	Max. Flowrate Lt./h		Press. Switch Setting bar		H	h1	h2	L1	L2	m1	B2	B	Manifolds		Weight Kg.
		Single Pump	Double Pump	P. Switch 1	P. Switch 2									ND1	ND2	
BP3	0,55+0,55	3000	6000	3,0÷4,2	2,5÷3,7	490	200	190	770	345				G2"	G1 1/2"	50
BP4	0,75+0,75	4000	8000	2,5÷3,7	2,1÷3,3	490	200	190	770	345				G2"	G1 1/2"	51
BP516	1,1+1,1	4200	8400	3,8÷5,3	3,4÷4,9	520	215	205	900	470				G2 1/2"	G1 1/2"	75
BP618	1,5+1,5	6000	12000	4,0÷5,5	3,5÷5,0	520	215	205	900	470				G2 1/2"	G1 1/2"	80
BP622	1,5+1,5	9000	18000	3,2÷4,5	2,8÷4,0	520	215	205	900	470	350	600	500	G2 1/2"	G1 1/2"	80
BP718	2,2+2,2	6500	12000	4,5÷5,8	4,0÷5,5	520	215	205	900	470				G2 1/2"	G1 1/2"	82
BP722	2,2+2,2	9000	18000	3,8÷5,3	3,4÷4,9	520	215	205	900	470				G2 1/2"	G1 1/2"	82



PRESSURE BOOSTING PLANT

No.2 CENTRIFUGAL PUMPS

ISAF M.TG srl Via B. Parodi, 286/A 16010 Ceranesi - Genoa Italy
Tel. 010781793 - 0107848136 Fax 0107268816 e-mail: info@isafmtg.com

Type	VX	Datasheet	29.9.10
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Pressure boosting plant, completely assembled on a rigid structure, consisting of:
no.2 vertical centrifugal E/pumps, inlet and outlet manifolds complete with check and non-return valves, adjustable differential pressure switches, pressure gauge and switchboard.
The supplied switchboard complies with the regulations fixed by the classification societies and has to be installed separately.

APPLICATION

This system assure a constant average pressure and guarantee rational water supply into the water lines.

OPERATION

When plant pressure decreases the pressure switches cause the start-up of the pumps in a cascade sequence.

MOTORS

2-pole induction motors
Three-phase 380 Vac 50 Hz. n= 2900 1/min.
440 Vac 60 Hz. n= 3500 1/min.
Other voltages and frequencies on request.

COMPLETE SYSTEMS

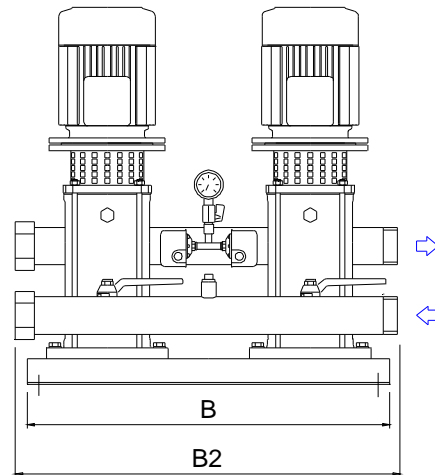
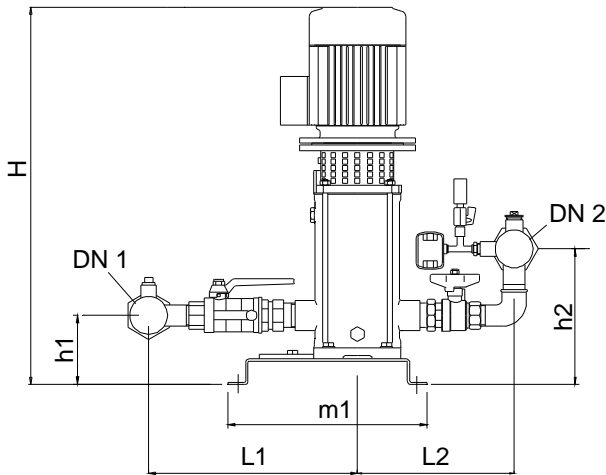
The pressure boosting plants can be supplied connected to the autoclave vessel, in package, complete with accessories, ready for use.

INSTALLATION

The equipment is supplied with instructions for assembling and maintenance. In any case, installation must comply with the regulations fixed by the classification society.

MATERIALS

Body	
Cover	1.4301 EN10088 (AISI 304)
Diffuser	
Impeller	
Shaft	1.4305 EN10088 (AISI 303)
Mechanical seal	Stainless steel - Graphite - EPDM



Voltage V.380 Hz.50

All information and data shown on this datasheet can be modified without notice

Model	Power kW	Max. Flowrate Lt./h		Press.switch setting bar		H	h1	h2	L1	L2	m1	B2	B	Manifolds		Weight Kg.	
		Single Pump	Double Pump	P. Switch 1	P. Switch 2									ND1	ND2		
VX525-205	0,75+0,75	4000	8000	3,0÷4,5	2,5÷4,0	490	125	225	330	254					G1 1/2"	G1 1/2"	94
VX532-405	1,1+1,1	7000	14000	3,0÷4,5	2,5÷4,0	490	125	235	360	270					G2"	G2"	98
VX540-806	2,2+2,2	12000	24000	4,0÷5,5	3,5÷5,0	520	130	255	445	350	350	600	500		ND50	ND50	122
VX550-1603	3+3	20000	40000	3,0÷4,5	2,5÷4,0	520	215	215	590	415					ND80	ND80	268

Voltage V.440 Hz.60

Model	Power kW	Max. Flowrate Lt./h		Press.switch setting bar		H	h1	h2	L1	L2	m1	B2	B	Manifolds		Weight Kg.	
		Single Pump	Double Pump	P. Switch 1	P. Switch 2									ND1	ND2		
VX625-204	1,1+1,1	5000	10000	3,5÷5,0	2,8÷4,5	490	200	190	770	345					G1 1/2"	G1 1/2"	92
VX632-404	2,2+2,2	9000	18000	3,0÷4,5	2,5÷4,0	490	200	190	770	345					G2"	G2"	96
VX640-804	3+3	15000	30000	4,0÷5,5	3,5÷5,0	520	215	205	900	470	350	600	500		ND50	ND50	120
VX650-1602	4+4	22000	44000	3,5÷4,5	2,5÷4,0	520	215	205	900	470					ND80	ND80	265



FIREFIGHTING AUTOCLAVE SYSTEM

ISAF M.TG srl Via B. Parodi, 286/A 16010 Ceranesi - Genoa Italy
 Tel. 010781793 - 0107848136 Fax 0107268816 e-mail: info@isafmtg.com

Type	SKA	Datasheet	16.7.40.1017
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Package system, completely automatic, assembled, cabled and ready for use. This plant is tested and homologated by the most important classification societies. This package consists of: horizontal cylindrical vessel, manifolds, valves, switchboard for plant monitoring and control, hydraulic and electrical lines. Predisposed for sea water E/pumps, fresh water E/pumps and E/compressor.

APPLICATION

Firefighting service.

DESIGN CONDITIONS

Max. Pressure 10 - 17 bar
 Max. Temperature 50 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning. For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

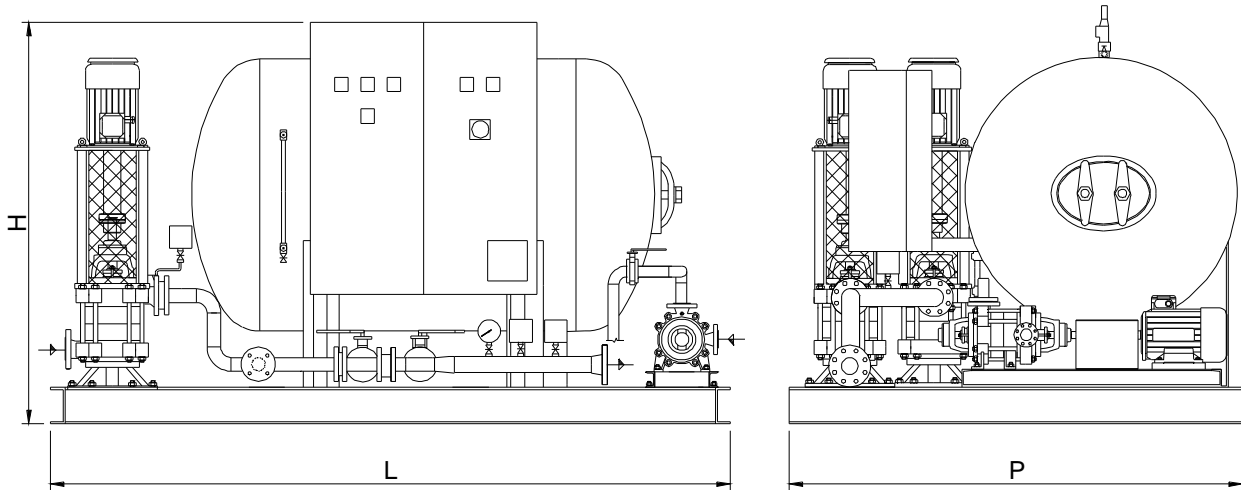
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI 2278/67 NP16
 UNI 6084/67 NP40

Model	Capacity Lt.	Max.Design Pressure bar	D	L	H	P	E - U	Weight Kg.
SKA2800H	2800	10		3000	1850	2000	ND125	2200
SKA2000H	2000	17		3000	1850	2000	ND65	2500

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 Tel. 010781793 - 0107848136 Fax 0107268816 e-mail: info@isafmtg.com

Type **ERIS** Datasheet **17.5.30.6**
 Rev. 0 Date 02/03/2003 Page 1/1

CONFIGURATION

Vertical cylindrical vessel with supports for floor installation, complete with thermal insulation, switchboard, electrical heaters and with the accessories requested by the classification society.

APPLICATION

Production and storage of hot water for sanitary use.

DESIGN CONDITIONS

Max. Pressure 6 bar
 Max. Temperature 90 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.
 For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

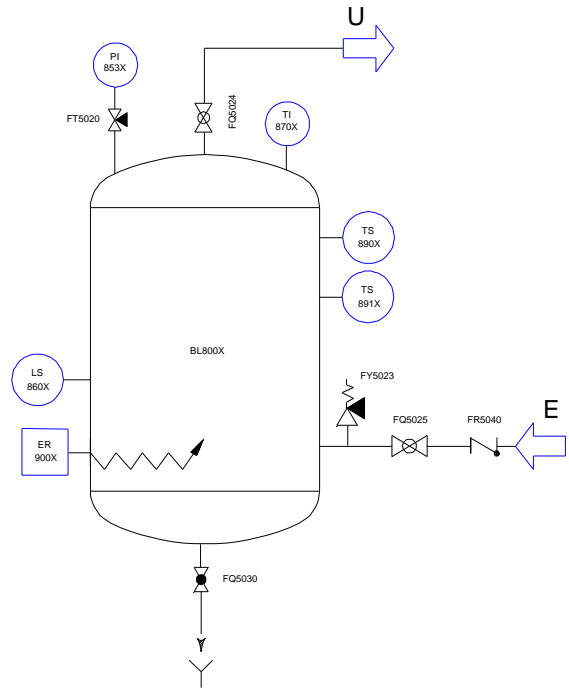
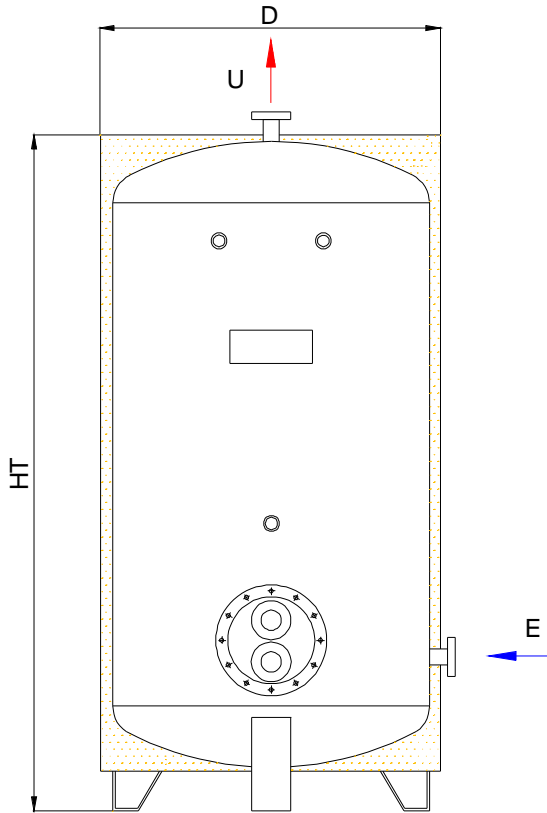
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	Power kW	D	HT	L	H	E - U	Weight Kg.
ERIS100V	100	6	3	500	1050			1"G	66
ERIS200V	200	6	5	500	1900			1"G	91
ERIS300V	300	6	3+3	700	1400			1 1/4"G	108
ERIS500V	500	6	5+5	700	2050			ND32	130
ERIS750V	740	6	7,5+5	900	1850			ND40	184
ERIS1000V	1000	6	7,5+7,5	900	2400			ND40	280
ERIS1500V	1500	6	10+10	1050	2550			ND50	358
ERIS2000V	2000	6	15+15	1200	2570			ND50	520
ERIS3000V	3000	6	25+25	1400	2710			ND80	815

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Type **ERIS** Datasheet **18.5.30.6**
Rev. 0 Date 02/03/2003 Page 1/1

CONFIGURATION

Horizontal cylindrical vessel on saddles, complete with thermal insulation, switchboard, electrical heaters and with the accessories requested by the classification society.

APPLICATION

Production and storage of hot water for sanitary use.

DESIGN CONDITIONS

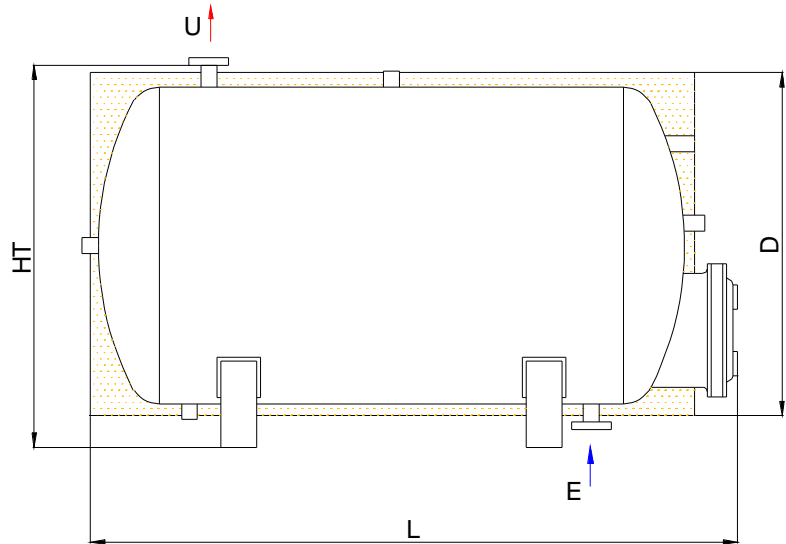
Max. Pressure 6 bar
Max. Temperature 90 °C
Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.
For an easier installation a wide range of components can be supplied.



TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

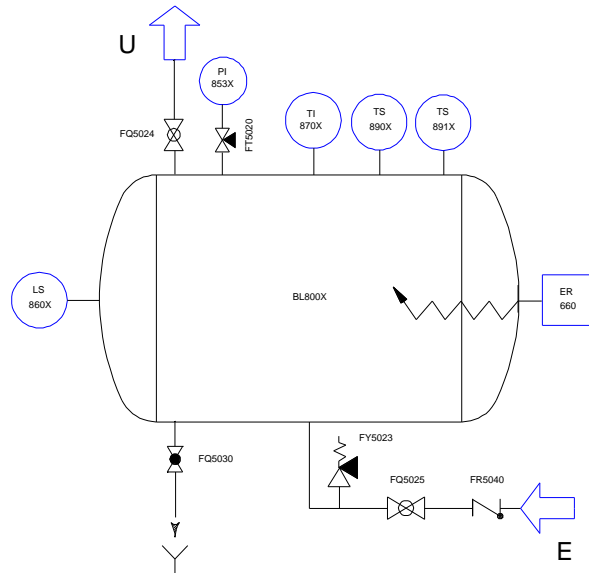
A1 STEEL P 265 GH
A2 STEEL P 355 NH
A3 ASTM A 106 B
X AISI 304 L
XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	Power kW	D	HT	L	H	E - U	Weight Kg.
ERIS100H	100	6	3	500		1250	700	1"G	96
ERIS200H	200	6	5	500		2100	700	1"G	122
ERIS300H	300	6	3+3	700		1600	900	1 1/4"G	138
ERIS500H	500	6	5+5	700		2250	900	ND32	181
ERIS750H	740	6	7,5+5	900		2050	1100	ND40	264
ERIS1000H	1000	6	7,5+7,5	900		2600	1100	ND40	355
ERIS1500H	1500	6	10+10	1050		2750	1250	ND50	458
ERIS2000H	2000	6	15+15	1200		2870	1450	ND50	670
ERIS3000H	3000	6	25+25	1400		3000	1650	ND80	1015

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Type	REI	Datasheet	21.5.30.6
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Horizontal cylindrical vessel on saddles for floor installation, complete with thermal insulation, switchboard electrical heaters and with the accessories requested by the classification society.

APPLICATION

Instantaneous production of hot water for heating, conditioning and fresh water plants.

DESIGN CONDITIONS

Max. Pressure 6 bar
 Max. Temperature 90 °C
 Min. Temperature 0 °C

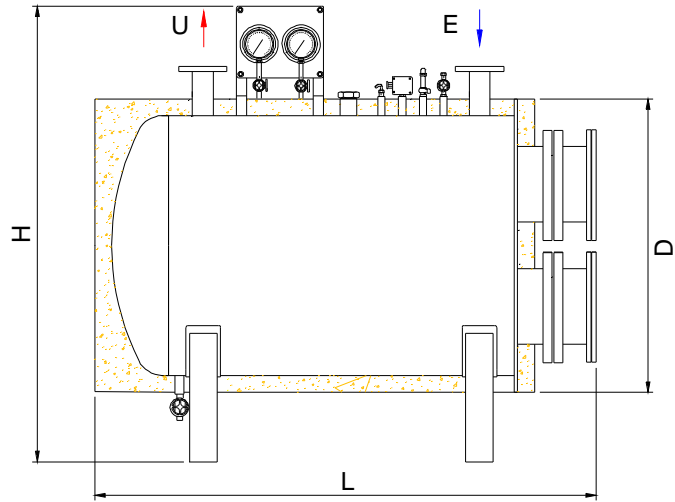
SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.



TESTS

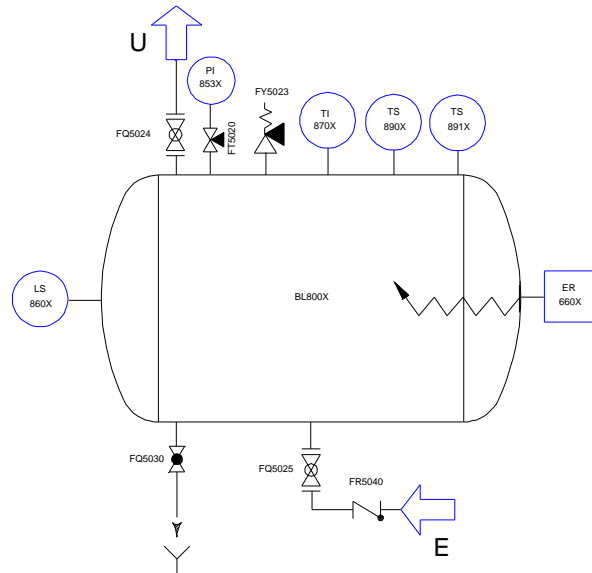
RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	Power kW	E/Heaters No./kW	D	L	H	E - U	Weight Kg.
REI3060	300	6	60	3x20	750	1450	1240	ND40	310
REI3090	300	6	90	3x30	750	1450	1240	ND50	350
REI3512	350	6	120	4x30	850	1450	1400	ND50	450
REI3516	350	6	160	4x40	850	1450	1400	ND80	490

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Type **TERIS** Datasheet **19.5.30.6**
 Rev. 0 Date 02/03/2003 Page 1/1

CONFIGURATION

Vertical cylindrical vessel with supports for floor installation, complete with thermal insulation, switchboard, electrical heaters, heat exchanger and with the accessories requested by the classification society.

APPLICATION

Production and storage of hot water for sanitary use.

DESIGN CONDITIONS

Max. Pressure 6 bar
 Max. Temperature 90 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

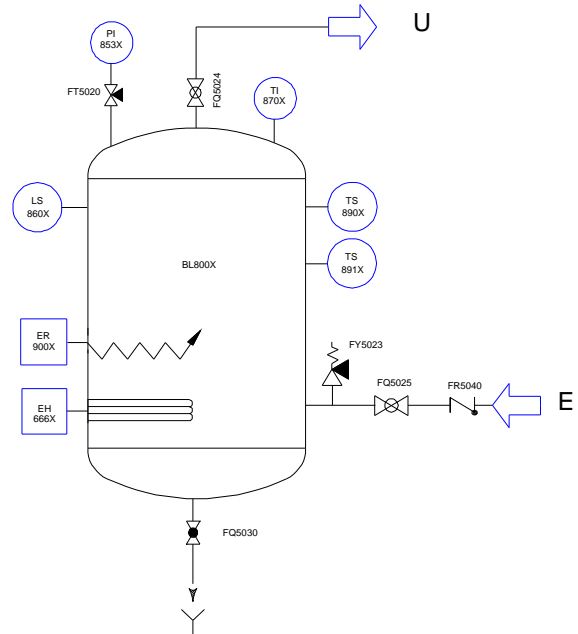
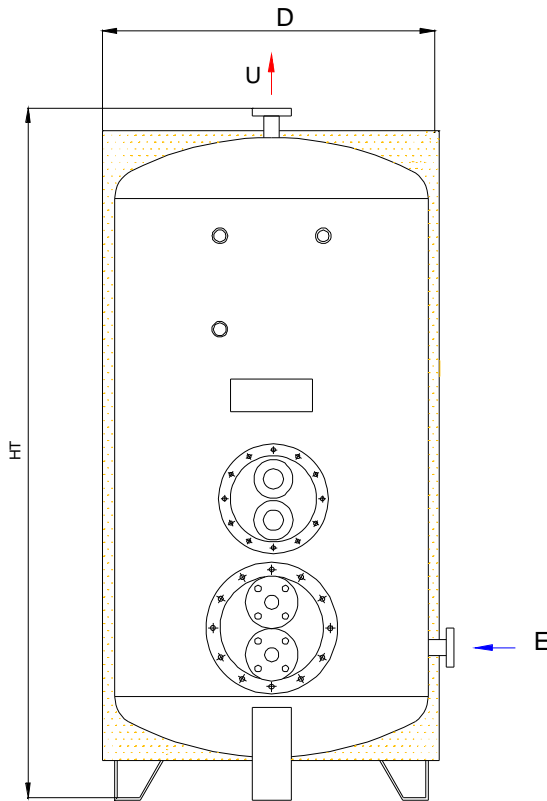
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	Power Kcal/h	Power kW	D	HT	L	H	E - U	Weight Kg.
TERIS500V	500	6	14200	5+5	700	2050			ND32	168
TERIS750V	750	6	20900	7,5+5	900	1850			ND40	210
TERIS1000V	1000	6	28400	7,5+7,5	900	2400			ND40	310
TERIS1500V	1500	6	42600	10+10	1050	2550			ND50	395
TERIS2000V	2000	6	56300	25	1200	2570			ND50	555
TERIS3000V	3000	6	67600	30	1400	2710			ND80	850



THERMO-ELECTRIC HEATER FOR HOT WATER

ISAF M.TG srl Via B. Parodi, 286/A 16010 Ceranesi - Genoa Italy
Tel. 010781793 - 0107848136 Fax 0107268816 e-mail: info@isafmtg.com

Type **TERIS** Datasheet **20.5.30.6**
Rev. 0 Date 02/03/2003 Page 1/1

CONFIGURATION

Horizontal cylindrical vessel with saddles for floor installation, complete with thermal insulation, switchboard electrical heaters, heat exchanger and with the accessories requested by the classification society.

APPLICATION

Production and storage of hot water for sanitary use.

DESIGN CONDITIONS

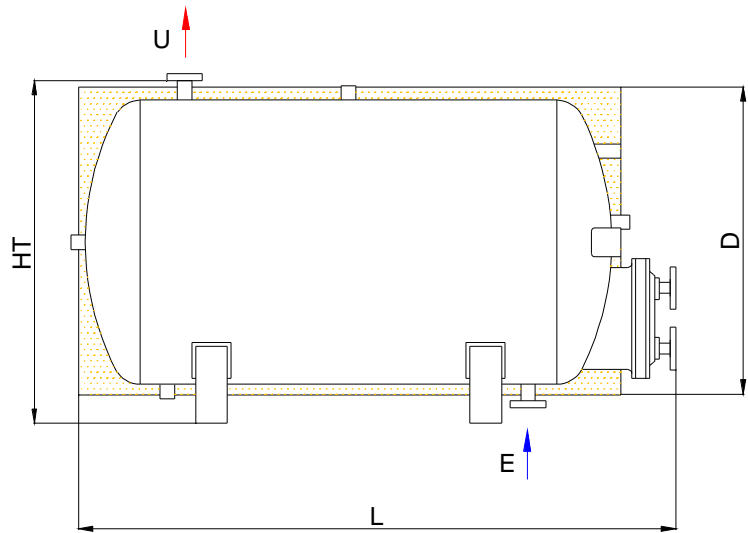
Max. Pressure 6 bar
Max. Temperature 90 °C
Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.
For an easier installation a wide range of components can be supplied.



TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

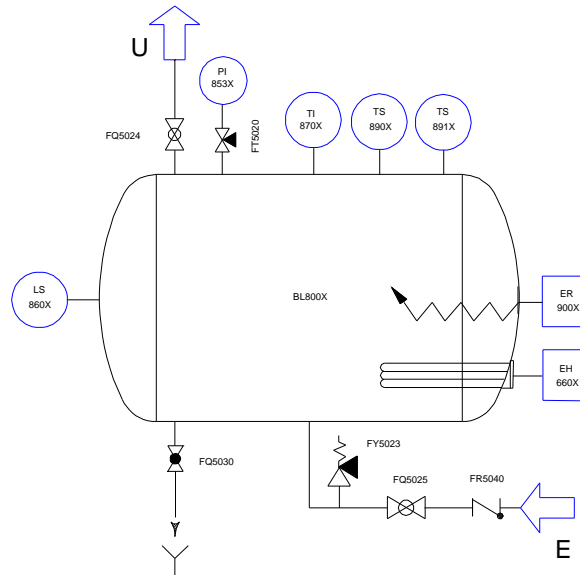
A1 STEEL P 265 GH
A2 STEEL P 355 NH
A3 ASTM A 106 B
X AISI 304 L
XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	Power Kcal/h	Power kW	D	HT	L	H	E - U	Weight Kg.
TERIS500H	500	6	14200	5+5	700		2050	2050	ND32	250
TERIS750H	750	6	20900	7,5+5	900		1850	1850	ND40	290
TERIS1000H	1000	6	28400	7,5+7,5	900		2400	2400	ND40	410
TERIS1500H	1500	6	42600	10+10	1050		2550	2550	ND50	500
TERIS2000H	2000	6	56300	25	1200		2570	2570	ND50	755
TERIS3000H	3000	6	67600	30	1400		2710	2710	ND80	1045

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Type **VEC-L** Datasheet **26.5.30.6**
 Rev. 0 Date 02/03/2003 Page 1/1

CONFIGURATION
 Vertical cylindrical vessel, complete with connections for plant and with the accessories requested by the classification society.

APPLICATION
 Absorbing the water expansion inside the plant when temperature increases and keeping plant pressurization within the set limits.

DESIGN CONDITIONS
 Max. Pressure 6 bar
 Max. Temperature 90 °C
 Min. Temperature 0 °C

SPECIAL PLANTS
 Particular constructions are realized on customer's specification.

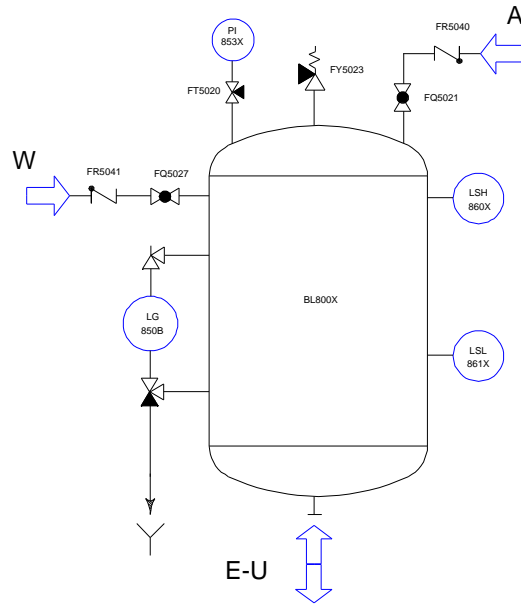
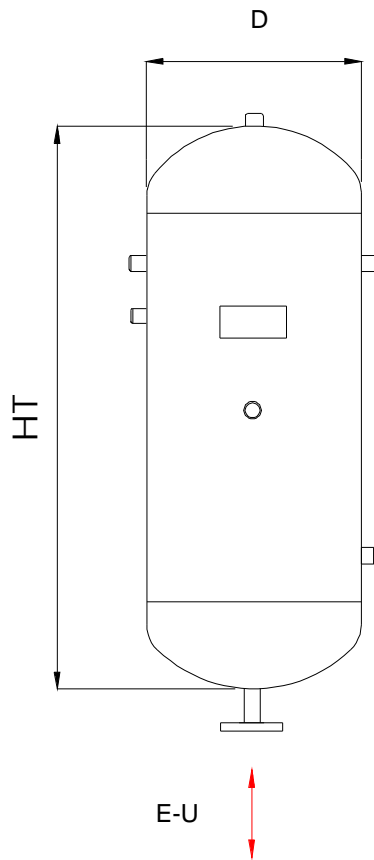
ACCESSORIES AND COMPONENTS
 ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.
 For an easier installation a wide range of components can be supplied.

TESTS
 RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS
 A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS
 Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS
 Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
VEC-L100	100	6	350	1100			ND32	40
VEC-L150	150	6	400	1250			ND32	46
VEC-L200	200	6	440	1400			ND32	58
VEC-L270	270	6	490	1460			ND40	65

EXPANSION TANK

FOR HOT WATER

ISAF M.TG srl Via B. Parodi, 286/A 16010 Ceranesi - Genoa Italy
 Tel. 010781793 - 0107848136 Fax 0107268816 e-mail: info@isafmtg.com

Type	VEC	Datasheet	22.5.30.6
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Vertical cylindrical vessel with supports for floor installation, complete with connections for plant and with the accessories requested by the classification society.

APPLICATION

Absorbing the water expansion inside the plant when temperature increases and keeping plant pressurization within the set limits.

DESIGN CONDITIONS

Max. Pressure 6 bar
 Max. Temperature 90 °C
 Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

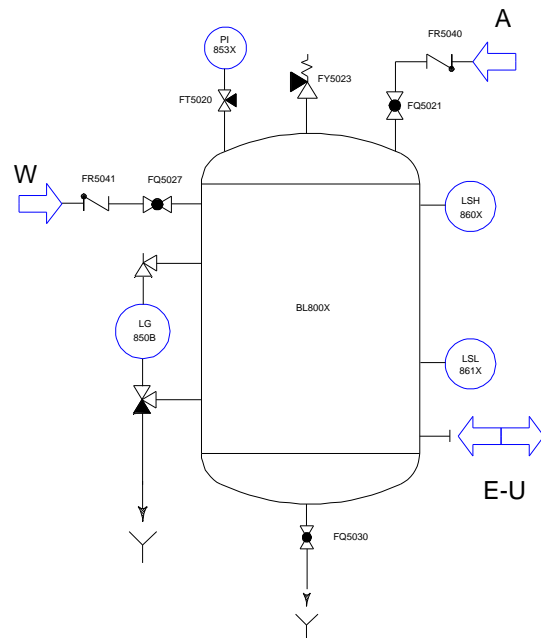
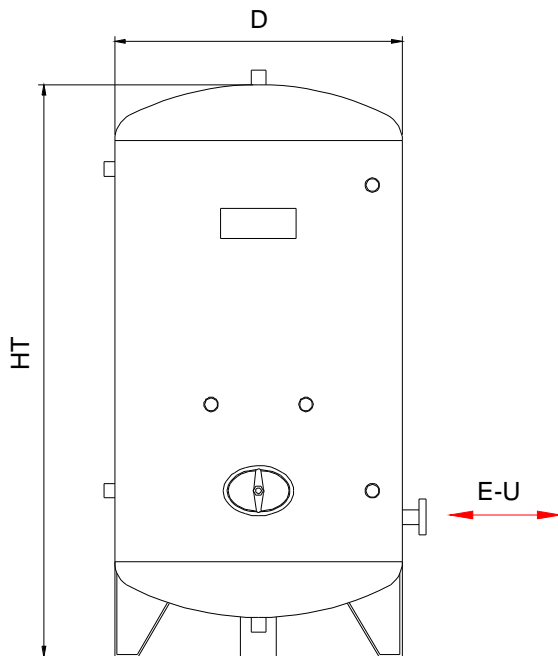
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
VEC400V	400	6	600	1720			ND40	140
VEC500V	500	6	600	2070			ND40	165
VEC600V	600	6	800	1500			ND50	170
VEC750V	750	6	800	1800			ND50	210
VEC1000V	1000	6	800	2300			ND80	260
VEC1500V	1500	6	950	2450			ND80	327
VEC2000V	2000	6	1100	2470			ND80	450
VEC3000V	3000	6	1300	2610			ND100	765
VEC5000V	5000	6	1600	2900			ND100	1025

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Type	VEC	Datasheet	23.5.30.6
Rev.	0	Date	02/03/2003
		Page	1/1

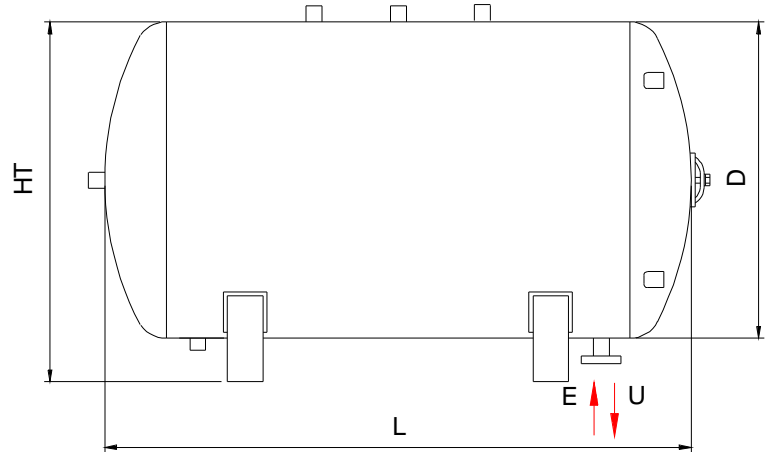
CONFIGURATION
 Horizontal cylindrical vessel with saddles for floor installation, complete with connections for plant and with the accessories requested by the classification society.

APPLICATION
 Absorbing the water expansion inside the plant when temperature increases and keeping plant pressurization within the set limits.

DESIGN CONDITIONS
 Max. Pressure 6 bar
 Max. Temperature 90 °C
 Min. Temperature 0 °C

SPECIAL PLANTS
 Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS
 ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.
 For an easier installation a wide range of components can be supplied.

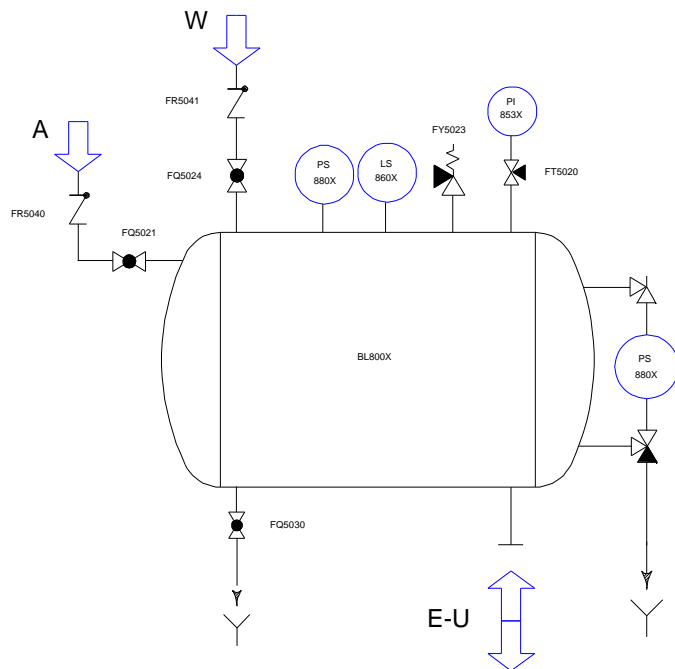


TESTS
 RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS
 A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS
 Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS
 Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
VEC400H	400	6	600		1570	800	ND40	240
VEC500H	500	6	600		1920	800	ND40	265
VEC600H	600	6	800		1350	1000	ND50	270
VEC750H	750	6	800		1650	1000	ND50	360
VEC1000H	1000	6	800		2450	1050	ND80	400
VEC1500H	1500	6	950		2300	1200	ND80	475
VEC2000H	2000	6	1100		2300	1350	ND80	650
VEC3000H	3000	6	1300		2460	1550	ND100	965
VEC5000H	5000	6	1600		2750	1850	ND100	1270

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Type **VER-L** Datasheet **27.5.10.6**
 Rev. 0 Date 02/03/2003 Page 1/1

CONFIGURATION
 Vertical cylindrical vessel, complete with connections for plant and with the accessories requested by the classification society.

APPLICATION
 Compensating the water volume reduction inside the plant when temperature decreases and keeping plant pressurization within the set limits.

DESIGN CONDITIONS
 Max. Pressure 6 bar
 Max. Temperature 90 °C
 Min. Temperature 0 °C

SPECIAL PLANTS
 Particular constructions are realized on customer's specification.

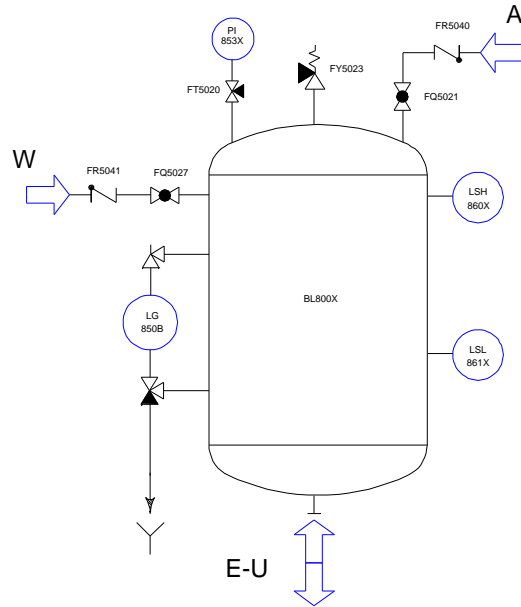
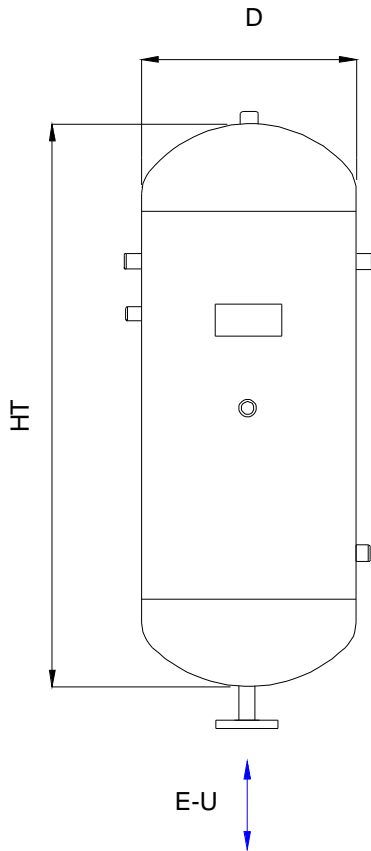
ACCESSORIES AND COMPONENTS
 ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.
 For an easier installation a wide range of components can be supplied.

TESTS
 RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS
 A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS
 Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS
 Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
VER-L100	100	6	350	1100			ND32	40
VER-L150	150	6	400	1250			ND32	46
VER-L200	200	6	440	1400			ND32	58
VER-L270	270	6	490	1460			ND40	65

ISAF M.TG srl Via B. Parodi, 286/A 16010 Ceranesi - Genoa Italy
Tel. 010781793 - 0107848136 Fax 0107268816 e-mail: info@isafmtg.com

Type	VER	Datasheet	24.5.10.6
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Vertical cylindrical vessel with supports for floor installation, complete with connections for plant and with the accessories requested by the classification society.

APPLICATION

Compensating the water volume reduction inside the plant when temperature decreases and keeping plant pressurization within the set limits.

DESIGN CONDITIONS

Max. Pressure 6 bar
Max. Temperature 90 °C
Min. Temperature 0 °C

SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.
For an easier installation a wide range of components can be supplied.

TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

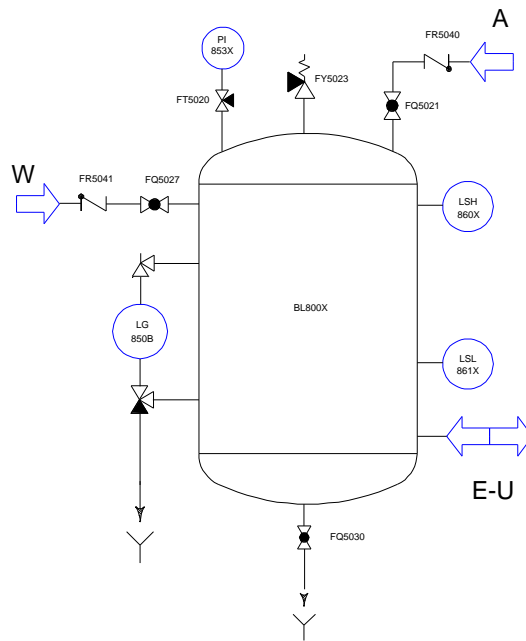
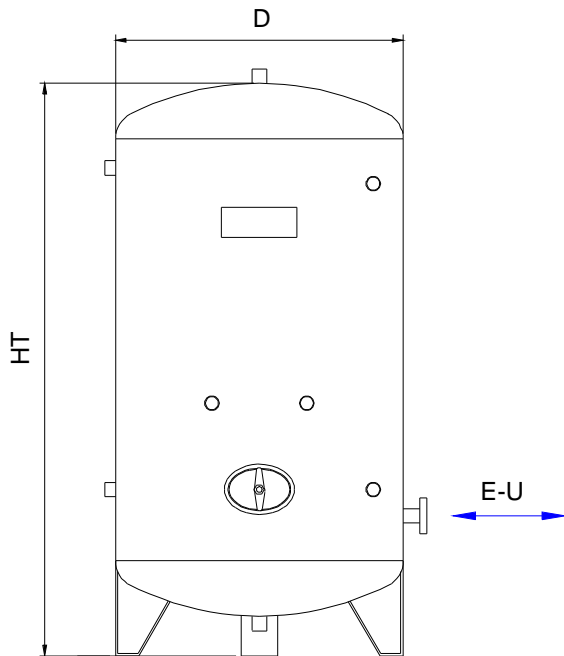
A1 STEEL P 265 GH
A2 STEEL P 355 NH
A3 ASTM A 106 B
X AISI 304 L
XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.



All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
VER400V	400	6	600	1720			ND40	140
VER500V	500	6	600	2070			ND40	165
VER600V	600	6	800	1500			ND50	170
VER750V	750	6	800	1800			ND50	210
VER1000V	1000	6	800	2300			ND80	260
VER1500V	1500	6	950	2450			ND80	327
VER2000V	2000	6	1100	2470			ND80	450
VER3000V	3000	6	1300	2610			ND100	765
VER5000V	5000	6	1600	2900			ND100	1025

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Type	VER	Datasheet	25.5.10.6
Rev.	0	Date	02/03/2003
		Page	1/1

CONFIGURATION

Horizontal cylindrical vessel with saddles for floor installation, complete with connections for plant and with the accessories requested by the classification society.

APPLICATION

Compensating the water volume reduction inside the plant when temperature decreases and keeping plant pressurization within the set limits.

DESIGN CONDITIONS

Max. Pressure 6 bar
 Max. Temperature 90 °C
 Min. Temperature 0 °C

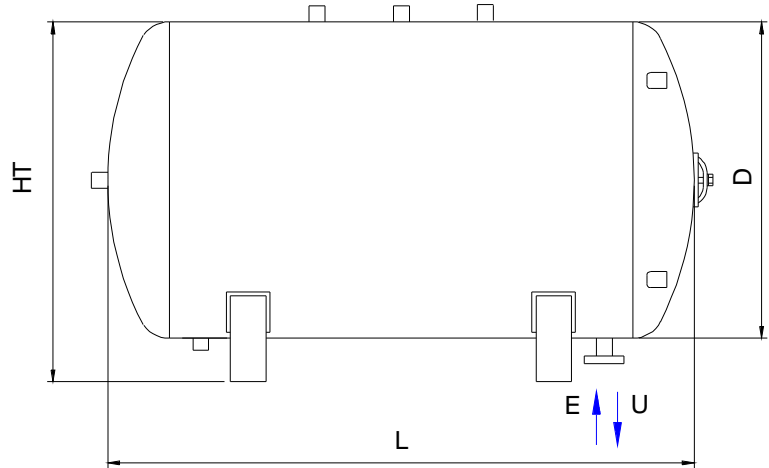
SPECIAL PLANTS

Particular constructions are realized on customer's specification.

ACCESSORIES AND COMPONENTS

ISAF systems can be supplied complete with monitoring equipments, valves, switchboards and other accessories which assure their proper functioning.

For an easier installation a wide range of components can be supplied.



TESTS

RINA - ABS - LR - BV - GL - DNV - MMI

MATERIALS

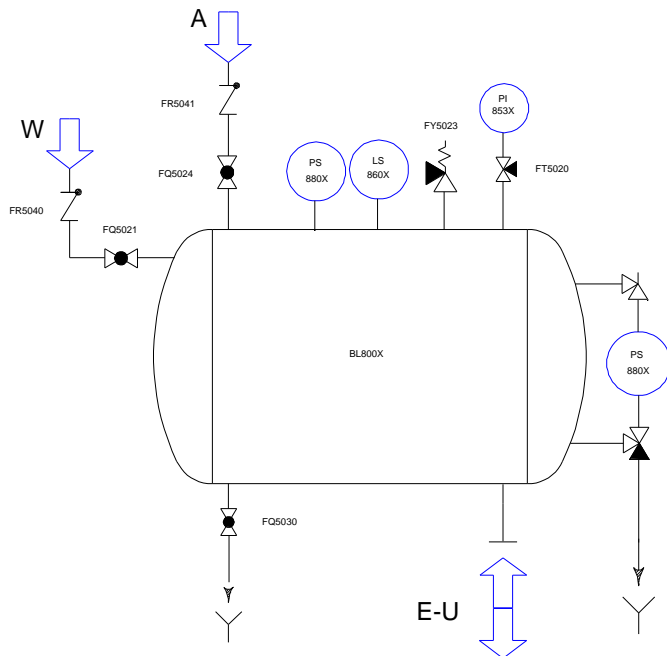
A1 STEEL P 265 GH
 A2 STEEL P 355 NH
 A3 ASTM A 106 B
 X AISI 304 L
 XX AISI 316 L

CONNECTIONS

Threaded BSP - NPT
 Flanged UNI - DIN - ASME - JIS

TREATMENTS

Treatment of internal and external surfaces according to the application of the plant.

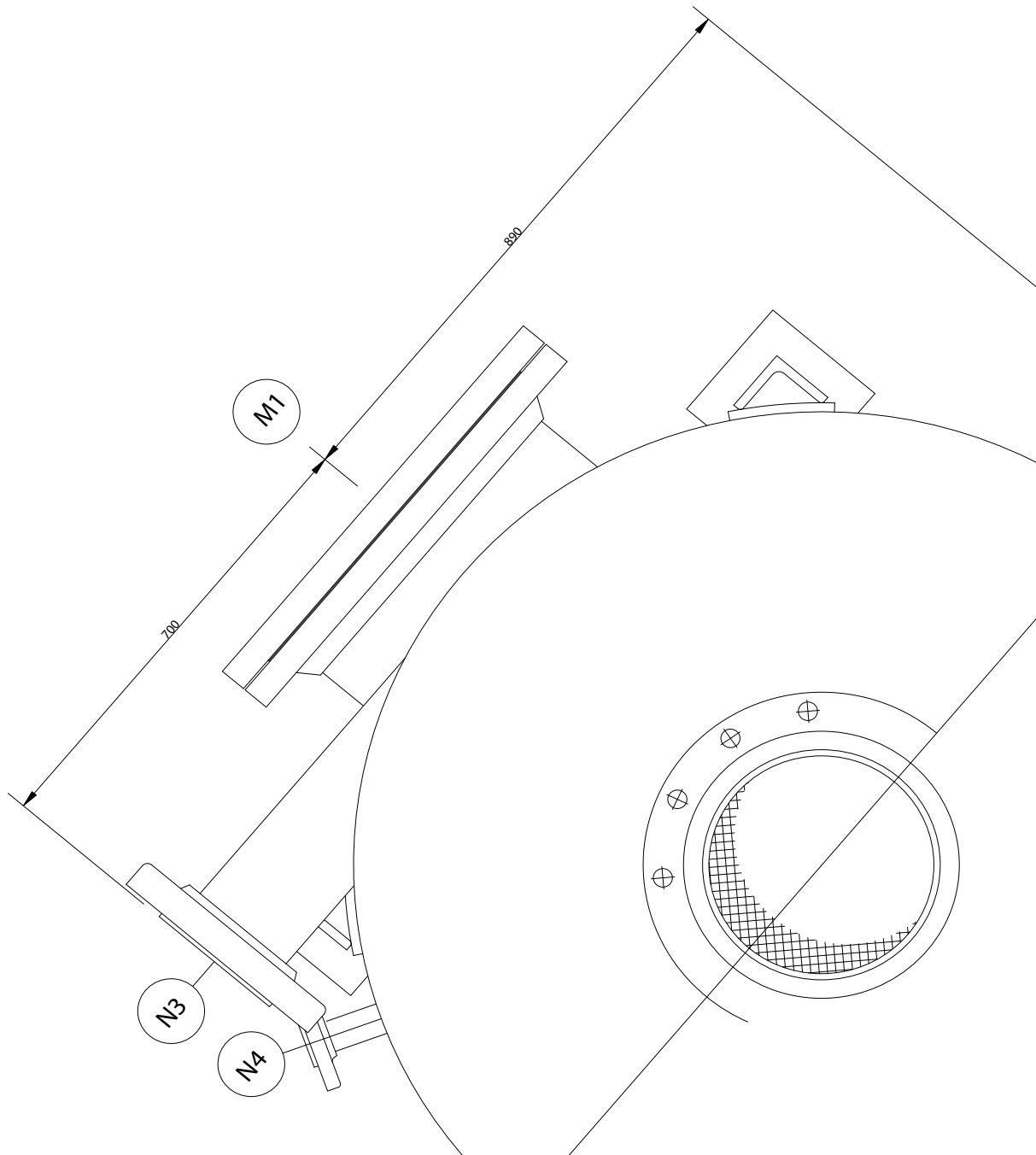


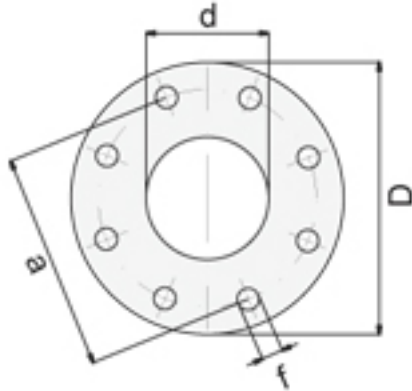
All information and data shown on this datasheet can be modified without notice

Standard flanges: UNI2278/67 NP16

Model	Capacity Lt.	Max.Design Pressure bar	D	HT	L	H	E - U	Weight Kg.
VER400H	400	6	600		1570	800	ND40	240
VER500H	500	6	600		1920	800	ND40	265
VER600H	600	6	800		1350	1000	ND50	270
VER750H	750	6	800		1650	1000	ND50	360
VER1000H	1000	6	800		2150	1050	ND80	400
VER1500H	1500	6	950		2300	1200	ND80	475
VER2000H	2000	6	1100		2300	1350	ND80	650
VER3000H	3000	6	1300		2460	1550	ND100	965
VER5000H	5000	6	1600		2750	1850	ND100	1270

Technical Tables

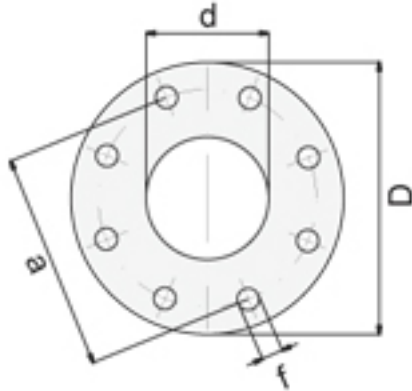




**Flange piane UNI 2276-67 PN 6
da saldare a sovrapposizione**

Slip-on Flanges UNI 2276-67 PN 6

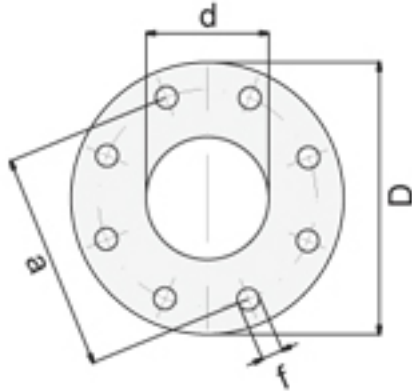
DN ND	D	d	Spessore Thickness	Fori - Holes			Peso Weight kg
				a	f	N°	
15	80	22,0	10	55	11	4	0,33
20	90	27,5	12	65	11	4	0,50
25	100	34,0	12	75	11	4	0,61
32	120	43,0	14	90	14	4	1,05
40	130	49,0	14	100	14	4	1,23
50	140	61,5	14	110	14	4	1,35
65	160	77,0	14	130	14	4	1,68
80	190	90,0	16	150	18	4	2,63
100	210	115,5	16	170	18	4	2,92
125	240	141,0	18	200	18	8	3,90
150	265	170,0	20	225	18	8	4,78
200	320	221,0	22	280	18	8	6,91
250	375	275,0	24	335	18	12	9,04
300	440	326,0	24	395	22	12	12,10
350	490	358,0	26	445	22	12	17,00
400	540	409,0	28	495	22	16	20,10
450	595	460,2	28	550	22	16	25,80
500	645	511,0	30	600	22	20	30,00



**Flange piane UNI 2278-67 PN 16
da saldare a sovrapposizione**

Slip-on Flanges UNI 2278-67 PN 16

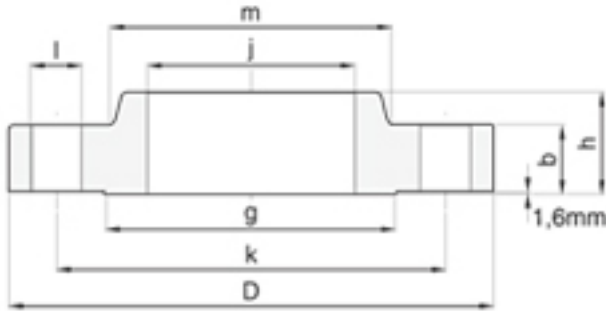
DN ND	D	d	Spessore Thickness	Fori - Holes			Peso Weight kg
				a	f	N°	
15	95	22,0	12	65	14	4	0,66
20	105	27,5	14	75	14	4	0,82
25	115	34,0	14	85	14	4	1,01
32	140	43,0	16	100	18	4	1,63
40	150	49,0	16	110	18	4	1,85
50	165	61,5	18	125	18	4	2,46
65	185	77,0	18	145	18	4	3,00
80	200	90,0	20	160	18	8	3,61
100	220	115,5	22	180	18	8	4,40
125	250	141,0	24	210	18	8	5,92
150	285	170,0	24	240	22	8	7,17
200	340	221,0	26	295	22	12	9,77
250	405	275,0	32	355	25	12	16,00
300	460	326,0	32	410	25	12	19,30
350	520	358,0	36	470	25	16	29,40
400	580	409,0	38	525	30	16	36,50
450	640	460,2	40	585	30	20	42,00
500	715	511,0	42	650	33	20	51,00



**Flange piane UNI 6084-67 PN 40
da saldare a sovrapposizione**

Slip-on Flanges UNI 6084-67 PN 40

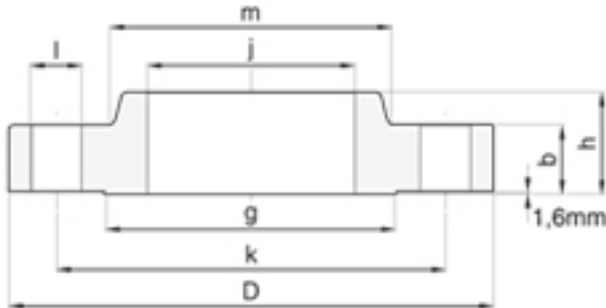
DN ND	D	d	Spessore Thickness	Fori - Holes			Peso Weight kg
				a	f	N°	
15	95	22,0	14	65	14	4	0,67
20	105	27,5	16	75	14	4	0,94
25	115	34,0	16	85	14	4	1,11
32	140	43,0	18	100	18	4	1,83
40	150	49,0	18	110	18	4	2,09
50	165	61,5	20	125	18	4	2,73
65	185	77,0	24	145	18	8	3,80
80	200	90,0	26	160	18	8	4,70
100	235	115,5	26	190	22	8	6,09
125	270	141,0	28	220	25	8	8,22
150	300	170,0	30	250	25	8	10,30
200	375	221,0	36	320	30	12	18,00
250	450	275,0	44	385	33	12	30,90
300	515	326,0	48	450	33	16	41,90
350	580	358,0	54	510	36	16	62,40
400	660	409,0	60	585	39	16	90,30



**Flange plane ASME 150 lb
da saldare a sovrapposizione**

Slip-on Flanges ASME 150 lb

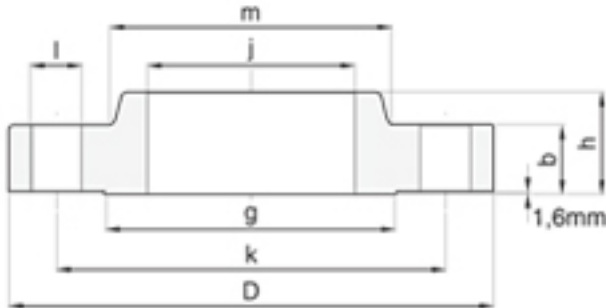
DN ND	D	g	h	m	j	b	k	Fori - Holes		Peso Weight kg
								l	N°	
1/2"	88,9	34,9	15,9	30,2	22,3	11,1	60,3	15,9	4	0,40
3/4"	98,4	42,9	15,9	38,1	27,7	12,7	69,8	15,9	4	0,70
1"	107,9	50,8	17,5	49,2	34,5	14,3	79,4	15,9	4	0,80
1" 1/4	117,5	63,5	20,6	58,8	43,2	15,9	88,9	15,9	4	1,10
1" 1/2	127,0	73,0	22,2	65,1	49,5	17,5	98,4	15,9	4	1,40
2"	152,4	92,1	25,4	77,8	62,0	19,0	120,6	19,0	4	2,20
2" 1/2	177,8	104,8	28,6	90,5	74,7	22,2	139,7	19,0	4	3,60
3"	190,5	127,0	30,2	107,9	90,7	23,8	152,4	19,0	4	4,10
3" 1/2	215,9	139,7	31,7	122,2	103,4	23,8	177,8	19,0	8	5,20
4"	228,6	157,2	33,3	134,9	116,1	23,8	190,5	19,0	8	6,80
5"	254,0	185,7	36,5	163,5	143,8	23,8	215,9	22,2	8	8,30
6"	279,4	215,9	39,7	192,1	170,7	25,4	241,3	22,2	8	7,50
8"	342,9	269,9	44,4	246,1	221,5	28,6	298,5	22,2	8	12,60
10"	406,4	323,8	49,2	304,8	276,3	30,2	361,9	25,4	12	18,50
12"	482,6	381,0	55,6	265,1	327,1	31,7	431,8	25,4	12	28,00
14"	533,4	412,7	57,1	400,0	359,1	34,9	476,2	28,6	12	36,00
16"	596,9	469,9	63,3	475,2	410,5	36,5	539,7	28,6	16	46,00
18"	635,0	533,4	68,3	504,8	461,8	39,7	577,8	31,7	16	50,00
20"	698,5	584,2	73,0	558,8	513,1	42,9	635,0	31,7	20	64,00
22"	749,3	641,2	79,4	609,6	564,4	46,0	692,1	34,9	20	72,00
24"	812,8	692,1	82,5	663,6	615,9	47,6	749,3	34,9	20	89,00



**Flange plane ASME 300 lb
da saldare a sovrapposizione**

Slip-on Flanges ASME 300 lb

DN ND	D	g	h	m	j	b	k	Fori - Holes		Peso Weight kg
								l	N°	
1/2"	95,6	34,9	22,2	38,1	22,3	14,3	66,7	15,9	4	0,70
3/4"	117,5	42,9	25,4	47,6	27,7	15,9	82,5	19,0	4	1,10
1"	123,8	50,8	27,0	54,0	34,5	17,5	88,9	19,0	4	1,40
1" 1/4	133,3	63,5	27,0	63,5	43,2	19,0	98,4	19,0	4	1,80
1" 1/2	155,6	73,0	30,2	69,8	49,5	20,6	114,3	22,2	4	2,60
2"	165,1	92,1	33,3	84,1	62,0	22,2	127,0	19,0	8	3,40
2" 1/2	190,5	104,8	38,1	100,0	74,7	25,4	149,2	22,0	8	4,40
3"	209,5	127,0	42,9	117,5	90,7	28,6	168,3	22,0	8	6,10
3" 1/2	228,6	139,7	44,4	133,3	103,4	30,2	184,1	22,0	8	7,50
4"	254,0	157,2	47,6	146,0	116,1	31,7	200,0	22,0	8	10,10
5"	279,4	185,7	50,8	177,8	143,8	34,9	234,9	22,2	8	12,50
6"	317,5	215,9	53,4	206,4	170,7	36,5	269,9	22,2	12	14,10
8"	381,0	269,9	61,9	260,3	221,5	41,3	330,2	25,4	12	24,80
10"	444,5	323,8	66,7	320,7	276,3	47,6	387,3	28,6	16	37,10
12"	520,7	381,0	73,0	374,6	327,1	50,8	450,8	31,7	16	50,00
14"	584,2	412,7	76,2	425,4	359,1	54,0	514,3	31,7	20	70,00
16"	647,7	469,9	82,5	482,6	410,5	57,1	571,5	34,9	20	90,00
18"	711,2	533,4	88,9	533,4	461,8	60,3	628,6	34,9	24	112,00
20"	774,7	584,2	95,2	587,4	513,1	63,5	685,8	34,9	24	133,00
22"	838,2	641,2	101,6	641,2	564,4	66,7	742,9	41,3	24	197,00
24"	914,4	692,1	106,4	701,7	615,9	69,8	812,8	41,3	24	208,00

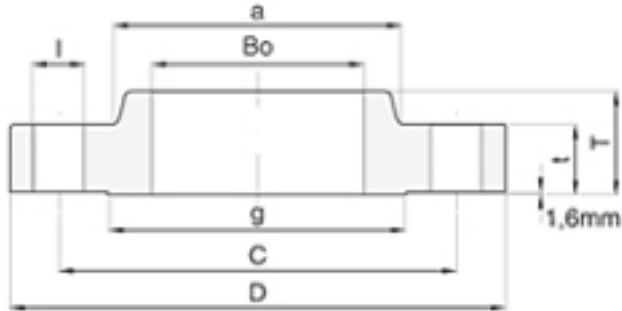


**Flange plane ASME 600 lb
da saldare a sovrapposizione**

Slip-on Flanges ASME 600 lb

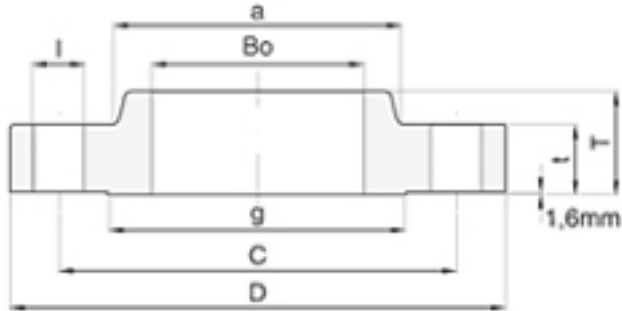
DN ND	D	g	h	m	j	b	k	Fori - Holes		Peso Weight kg
								l	N°	
1/2"	95,6	34,9	22,2	38,1	22,3	14,3	66,7	15,9	4	0,80
3/4"	117,5	42,9	25,4	47,6	27,7	15,9	82,5	19,0	4	1,40
1"	123,8	50,8	27,0	54,0	34,5	17,5	88,9	19,0	4	1,60
1" 1/4	133,3	63,5	28,6	63,5	43,2	20,6	98,4	19,0	4	2,10
1" 1/2	155,6	73,0	31,7	69,8	49,5	22,2	114,3	22,2	4	3,10
2"	165,1	92,1	36,5	84,1	62,0	25,4	127,0	19,0	8	3,70
2" 1/2	190,5	104,8	41,3	100,0	74,7	28,6	149,2	22,0	8	5,40
3"	209,5	127,0	46,0	117,5	90,7	31,7	168,3	22,0	8	7,30
3" 1/2	228,6	139,7	49,2	133,3	103,4	34,9	184,1	25,4	8	8,90
4"	273,0	157,2	106,1	152,4	116,1	38,1	215,9	25,4	8	11,80
5"	330,2	185,7	60,3	188,9	143,8	44,4	266,7	28,6	8	24,50
6"	355,6	215,9	66,7	222,2	170,7	47,6	292,1	28,6	12	29,50
8"	419,1	269,9	76,2	173,0	221,5	55,6	349,2	31,7	12	43,00
10"	508	323,8	85,7	342,9	276,3	63,5	431,8	34,9	16	70,00
12"	558,8	381,0	92,1	400,0	327,1	66,7	488,9	34,9	20	86,00
14"	603,2	412,7	93,7	431,8	359,1	69,8	527,0	38,1	20	100,00
16"	685,8	469,9	106,4	495,3	410,5	76,2	603,2	41,3	20	142,00
18"	742,9	533,4	117,5	546,1	461,8	82,5	654,0	44,4	20	175,00
20"	812,8	584,2	127	609,6	513,1	88,9	723,9	44,4	24	232,00
22"	869,9	641,2	133,3	666,7	564,4	95,2	777,9	47,6	24	292,00
24"	939,8	692,1	1139,7	717,5	615,9	101,6	838,2	50,8	24	330,00

Pressure Vessels



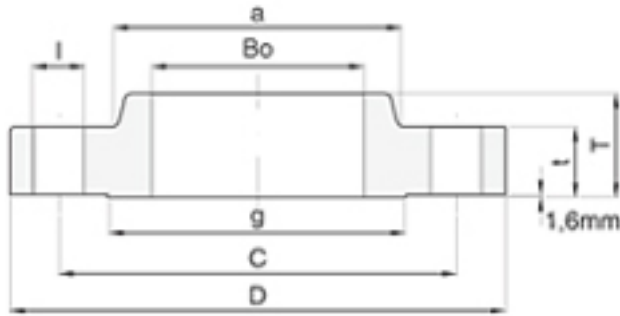
Slip-on flanges JIS 10K B.2220

ND	D	g	T	a	Bo	t	C	Holes I	N°	Weight kg
1/2"	95				22,2	12	70	15	4	0,60
3/4"	100				27,7	14	75	15	4	0,73
1"	125				34,5	14	90	19	4	1,13
1" 1/4	135				43,2	16	100	19	4	1,50
1" 1/2	140				49,1	16	105	19	4	1,60
2"	155				61,1	16	120	19	4	1,90
2" 1/2	175				77,1	18	140	19	4	2,60
3"	185				90,0	18	150	19	8	2,60
3" 1/2	195				102,6	18	160	19	8	2,80
4"	210				115,4	18	175	19	8	3,20
5"	250				141,2	20	210	23	8	4,80
6"	280				166,6	22	240	23	8	6,40
8"	330				218,0	22	290	23	12	7,53
10"	400	325	36	292	269,5	24	355	25	12	12,70
12"	445	370	38	370	321,0	24	400	25	16	13,60
14"	490	415	42	415	358,1	26	445	25	16	18,20
16"	560	475	44	442	409,0	28	510	27	16	25,20
18"	620	530	48	502	460,0	30	565	27	20	33,00
20"	675	585	48	554	511,0	30	620	27	20	37,60
22"	745	640	52	610	562,0	32	680	33	20	49,70
24"	795	690	52	662	613,0	32	730	33	24	52,60



Slip-on flanges JIS 20K B.2220

ND	D	g	T	a	Bo	t	C	Holes I	N°	Weight kg
1/2"	95				22,2	14	70	15	4	0,70
3/4"	100				27,7	16	75	15	4	0,80
1"	125				34,5	16	90	19	4	1,30
1" 1/4	135				43,2	18	100	19	4	1,60
1" 1/2	140				49,1	18	105	19	4	1,70
2"	155	96	26	76	61,1	18	120	19	8	1,90
2" 1/2	175	116	30	100	77,1	20	140	19	8	2,6
3"	200	132	34	113	90,0	22	160	23	8	3,90
3" 1/2	210	145	36	126	102,6	24	170	23	8	4,60
4"	225	160	36	138	115,4	24	185	23	8	5,10
5"	270	195	40	166	141,2	26	225	25	8	8,30
6"	305	230	42	196	166,6	28	260	25	12	10,60
8"	350	275	46	244	218,0	30	305	25	12	13,30
10"	430	345	52	304	269,5	34	380	27	12	23,40
12"	480	395	56	354	321,0	36	430	27	16	27,70
14"	540	440	62	398	358,1	40	480	33	16	39,20
16"	605	495	70	446	409,0	46	540	33	16	54,20
18"	675	560	78	504	460,0	48	605	33	20	71,70
20"	730	615	84	558	511,0	50	660	33	20	86,20
22"	795	670	90	612	562,0	52	720	39	20	105,00
24"	845	720	96	666	613,0	54	770	39	24	119,00



Slip-on flanges JIS 40K B.2216

ND	D	g	T	a	Bo	t	C	Holes I	N°	Weight kg
1/2"	115	55	30	39	22,2	20	80	19	4	1,39
3/4"	120	60	30	45	27,7	20	85	19	4	1,50
1"	130	70	32	55	34,5	22	95	19	4	2,00
1" 1/4	140	80	35	64	43,2	24	105	19	4	2,50
1" 1/2	160	90	35	70	49,1	24	120	23	4	3,26
2"	165	105	38	86	61,1	26	130	23	8	3,47
2" 1/2	200	130	44	106	77,1	30	160	23	8	5,97
3"	210	140	46	118	90,0	32	170	23	8	6,76
4"	250	165	52	145	115,4	36	205	25	8	10,50
5"	300	200	58	182	141,2	40	250	27	8	17,00
6"	355	240	64	200	166,6	44	295	33	12	22,60
8"	405	290	72	255	218,0	50	345	33	12	34,90
10"	475	353	80	310	269,5	56	410	33	12	41,40

Tabella tubi ASTM - dimensioni e spessori
ASTM pipes dimensions and thickness

ND	Ø est.	Std	XS	XXS	sch.10	sch.20	sch.30	sch.40	sch.60	sch.80	sch.100	sch.120	sch.140	sch.160	
1/8"	10.29	1.73	2.41					1.73		2.41					
1/4"	13.72	2.23	3.02					2.23		3.02					
3/8"	17.14	2.31	3.20					2.31		3.20					
1/2"	21.34	2.77	3.73	7.47				2.77		3.73				4.75	
3/4"	26.67	2.87	3.91	7.82				2.87		3.91				5.54	
1"	33.40	3.38	4.55	9.09				3.38		4.55				6.35	
1"1/4	42.16	3.56	4.85	9.70				3.56		4.85				6.35	
1"1/2	48.26	3.68	5.08	10.16				3.68		5.08				7.14	
2"	60.32	3.91	5.54	11.07				3.91		5.54				8.71	
2"1/2	73.02	5.16	7.01	14.02				5.16		7.01				9.52	
3"	88.90	5.49	7.62	15.24				5.49		7.62				11.12	
3"1/2	101.60	5.74	8.08					5.74		8.07					
4"	114.30	6.02	8.56	17.12				6.02		8.56		11.12		13.49	
5"	141.30	6.55	9.52	19.05				6.55		9.52		12.70		15.87	
6"	168.27	7.11	11.97	21.94				7.11		11.97		14.27		18.24	
8"	219.07	8.18	12.70	22.22		6.35	7.04	8.18	10.31	12.70	15.06	18.24	20.62	23.01	
10"	273.05	9.27	12.70			6.35	7.80	9.27	12.70	15.06	18.24	21.41	25.40	28.57	
12"	323.85	9.52	12.70			6.35	8.38	10.31	14.27	17.45	21.41	25.40	28.57	33.32	
14"	355.60	9.52	12.70			6.35	7.92	9.52	11.12	15.06	19.05	23.80	27.76	31.75	35.71
16"	406.40	9.52	12.70			6.35	7.92	9.52	12.70	16.66	21.41	26.19	30.94	36.52	40.46
18"	457.20	9.52	12.70			6.35	7.92	11.12	14.27	19.05	23.80	29.36	34.92	39.67	45.24
20"	508.00	9.52	12.70			6.35	9.52	12.70	15.06	20.62	26.19	32.54	38.10	44.45	49.99
24"	609.60	9.52	12.70			6.35	9.52	14.27	17.45	24.59	30.94	38.89	46.02	52.37	59.51
30"	762.00					7.92	12.70	15.87							

Units of measurement conversion table

Length	IS	meter	m	1 m = 3.28 ft = 39.37 in
	Engl.	inch	1", in	1 in = 2.54 cm
	Engl.	foot	1', ft	1 ft = 12 in = 30.48 cm
	Engl.	yard	yd	1 yd = 3ft = 91.44 cm
	Engl.	nautical mile		1 nautical mile = 1 852 m 1 nodo = 1 853.181 m
	Engl.	statute mile US		1 statute mile = 1 609.347 m
Mass (quantity of matter)	IS	kilogram	kg	1 kg = 2.204 lb
	(1)	ton	t	1 t = 1 000 kg = 1 Mg
	Engl.	pound	lb	1 lb = 0.454 kg
Force or Weight (Mass x Acceleration)	IS	newton (kg·m/s ²)	N	1 N = 0.102 kgf 1 kgf = 9.81 N
	Tec.	kilogram	kg	1 kg = 9.81 N 1 N = 0.102 kg
Pressure (Force/Surface)	IS	pascal	Pa	1 Pa = 1 N/m ² 1 kPa = 0.01 bar = 1 N/cm ²
	(1)	-	bar	1 bar = 100.000 Pa = 1.019 kg/cm ² = 14.48 psi = 10.19 mH ₂ O
	Engl.	pounds / inch ²	psi	1 psi = 6.906 kPa = 0.068 bar = 0.0703 kg/cm ²
	Tec.	technical atmosphere	at	1 at = 1 kg/cm ² = 736 mm di Hg = 10 mH ₂ O = 98.066 Pa
	Tec.	-	kg/cm ²	1 kg/cm ² = 98.068 kPa = 0.980 bar = 0.967 atm
	Tec.	metric atmosphere	atm	1 atm = 101 325 Pa = 760 mm di Hg = 1.033 at = 1 torr
Volume	IS	cubic meter	m ³	1 m ³ = 35.3146 ft ³ = 61023.759 in ³ = 264,20 galUS
	Engl.	cubic foot	ft ³	1 ft ³ = 0.02832 m ³ = 1728.0006 in ³
	Engl.	cubic inch	in ³	1 in ³ = 0.00001638 m ³ = 0.0005787 ft ³
	U.S.	gallon US	galUS	1 galUS = 0.003785 m ³
	U.K.	gallon UK	galUK	1 galUK = 0.004546 m ³
	Specific Weight	IS	newton / dm ³	N/dm ³
Tec.		kg / dm ³	kg/dm ³	1 kg/dm ³ = 9.807 N/dm ³
Temperature	IS	kelvin	K	1 K = °C + 273.15
	IS	degree centigrade	°C	1 °C = (°F-32) x 5/9 = K - 273.15
	Engl.	fahrenheit degree	°F	1 °F = 9/5 x °C + 32
Moment or Couple (Force x Distance)	IS	newton per meter	N·m	1 N·m = 0.102 kg·m = 0.7376 ft·lb
	Tec.	kilogram per meter	kg·m	1 kg·m = 9.807 N·m = 7.233 ft·lb
Work and Energy	IS	joule	J	1 J = 1N·m 1 J = 0.102 kg·mJ 1 kg·m = 9.807
	Tec.	kilowatt per hour	kW·h	1 kW·h = 1.36 CV·h = 860 kcal = 1.000 W x 1J = 3.6x10 ⁶ J
Power (Work/Time)	IS	watt	W	1 kW = 1.36 CV = 1.34 HP = 860 kcal/h
	Engl.	horsepower	HP	1 HP = 1.014 CV = 0.746 kW
Angle	IS	radial	rad	1 rad = 57°,29578 = 57° 17' 44",81 = 63 ^c ,66198 1 angolo giro = 2 p rad
	Tec.	sexagesimal degree	1°	1° = 0.01745 rad = 1.11111 ^c
	Tec.	centesimal degree	1 ^c	1 ^c = 0.01571 rad = 0.90°

Units of measurement International System (IS)

Some fundamental IS Units

Length	meter	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamical temperature	kelvin	K
Luminous intensity	candle	cd
Straight angle	radial	rad

Some IS derived units of measurement

Frequency	hertz	Hz
Force	newton	N
Pressure - Tension	pascal	Pa
Work - Energy - Quantity of heat	joule	J
Power	watt	W
Electrical potential - Difference of potential - Voltage - Electromagnetic force	volt	V
Electrical capacity	farad	F
Electrical resistance	ohm	F
Electric conductance	siemens	S
Magnetic induction flux: Magnetic Flux	weber	Wb
Luminous flux	lumen	lm
Luminosity	lux	lx

Some multiples and decimal submultiples: IS prefix

tera	T	10^{12}	1 000 000 000 000
giga	G	10^9	1 000 000 000
mega	M	10^6	1 000 000
kilo	k	10^3	1 000
etto	h	10^2	100
deca	da	10^1	10
deci	d	10^{-1}	0.1
centi	c	10^{-2}	0.01
milli	m	10^{-3}	0.001
micro	μ	10^{-6}	0.000 001
nano	n	10^{-9}	0.000 000 001
pico	p	10^{-12}	0.000 000 000 001

Some derived units of measurement have their proper noun (ex.: pressure **1 Pa** = 1N/m², work **1J** = 1N·m), some of them do not have one (ex.: speed **m/s**, viscosity **kg/m·s**)

Pipes identification colors

The UNI 5634-97 Rule describes in details the identification system of pipes and surface canalizations that carry fluids. The identification colors can be applied all over the pipe surface or on stripes of 230 mm wide (minimum width); stripes width progressively increases on larger diameters. When using colored stripes the background color of pipe cannot be one of those provided for in this rule. For what concerns dangerous fluids, beside the different background color these pipes must show the danger symbol and the name or formula of the carried fluid.

Identification colors for the most common fluids:

Fire extinction	Red (RAL 3000)
Water	Green (RAL 6032)
Vapour from heated water	Silver-grey (RAL 9006)
Air	Light blue
Mineral oils, combustibile and/or inflammable liquids	Brown (RAL 8007)
Gas in gaseous or liquid state (air excluded)	Ochre-yellow (RAL 1024)
Acids	Orange (RAL 2010)
Dangerous fluids	Yellow (RAL 1021)

RAL colors table

RAL 1000	RAL 1001	RAL 1002	RAL 1003	RAL 1004	RAL 1005	RAL 1006	RAL 1007
RAL 1011	RAL 1012	RAL 1013	RAL 1014	RAL 1015	RAL 1016	RAL 1017	RAL 1018
RAL 1019	RAL 1020	RAL 1021	RAL 1023	RAL 1024	RAL 1027	RAL 1028	RAL 1032
RAL 1033	RAL 1034	RAL 2000	RAL 2001	RAL 2002	RAL 2003	RAL 2004	RAL 2008
RAL 2009	RAL 2010	RAL 2011	RAL 2012	RAL 3000	RAL 3001	RAL 3002	RAL 3003
RAL 3004	RAL 3005	RAL 3007	RAL 3009	RAL 3011	RAL 3012	RAL 3013	RAL 3014
RAL 3015	RAL 3016	RAL 3017	RAL 3018	RAL 3020	RAL 3022	RAL 3027	RAL 3031
RAL 4001	RAL 4002	RAL 4003	RAL 4004	RAL 4005	RAL 4006	RAL 4007	RAL 4008
RAL 4009	RAL 5000	RAL 5001	RAL 5002	RAL 5003	RAL 5004	RAL 5005	RAL 5007
RAL 5008	RAL 5009	RAL 5010	RAL 5011	RAL 5012	RAL 5013	RAL 5014	RAL 5015
RAL 5017	RAL 5018	RAL 5019	RAL 5020	RAL 5021	RAL 5022	RAL 5023	RAL 5024
RAL 6000	RAL 6001	RAL 6002	RAL 6003	RAL 6004	RAL 6005	RAL 6006	RAL 6007
RAL 6008	RAL 6009	RAL 6010	RAL 6011	RAL 6012	RAL 6013	RAL 6014	RAL 6015
RAL 6016	RAL 6017	RAL 6018	RAL 6019	RAL 6020	RAL 6021	RAL 6022	RAL 6024
RAL 6025	RAL 6026	RAL 6027	RAL 6028	RAL 6029	RAL 6032	RAL 6033	RAL 6034
RAL 7000	RAL 7001	RAL 7001	RAL 7002	RAL 7003	RAL 7004	RAL 7005	RAL 7006
RAL 7008	RAL 7009	RAL 7010	RAL 7011	RAL 7012	RAL 7013	RAL 7015	RAL 7016
RAL 7021	RAL 7022	RAL 7023	RAL 7024	RAL 7026	RAL 7030	RAL 7031	RAL 7032
RAL 7033	RAL 7034	RAL 7035	RAL 7036	RAL 7037	RAL 7038	RAL 7039	RAL 7040
RAL 7042	RAL 7043	RAL 7044	RAL 8000	RAL 8001	RAL 8002	RAL 8003	RAL 8004
RAL 8007	RAL 8008	RAL 8011	RAL 8012	RAL 8014	RAL 8015	RAL 8016	RAL 8017
RAL 8019	RAL 8022	RAL 8023	RAL 8024	RAL 8025	RAL 8028	RAL 9001	RAL 9002
RAL 9003	RAL 9004	RAL 9005	RAL 9010	RAL 9011	RAL9016	RAL 9017	RAL 9018